AGRICULTURAL ECONOMIC REPORT NO. 41 - 49
1963-64

economic aspects of pecan production and marketing

FLORIDA
ARKANSAS
SOUTH CAROLINA
MISSISSIPPI
NEW MEXICO
GEORGIA

UNITED STATES DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

PREFACE

Pecans have been an important source of income to growers in the South for many years. In 1961, the United States Department of Agriculture undertook a study of the pecan industry as part of a broad program of research aimed at increasing market efficiency and expanding markets for farm products. Southern States were asked to cooperate in this phase of the study to determine the production and marketing practices of pecan growers.

Personnel of 6 State agricultural experiment stations conducted surveys of pecan growers during the summer and fall of 1961 and generously supplied the data for this report. Personnel responsible for the surveys, by State, were:

Arkansas--Dr. H. J. Meenen, Head, and Dr. Donald E. Farris, Associate Agricultural Economist, Department of Agricultural Economics, University of Arkansas.

Florida-- Dr. H. G. Hamilton, Head, and Dr. Donald L. Brooke, Agricultural Economist, Department of Agricultural Economics, University of Florida.

Georgia-- Dr. N. M. Penny, Head, and J. R. Russell, Assistant Agricultural Economist, Department of Agricultural Economics, Georgia Experiment Station, Experiment, Georgia.

Mississippi--Dr. D. W. Parvin, Head, Department of Agricultural Economics, Mississippi State University.

New Mexico--Dr. H. R. Stucky, Head, and S. C. James, Assistant Professor, Department of Agricultural Economics, New Mexico State University.

South Carolina--Dr. G. H. Aull, Head, and Wendell H. Thomas, Assistant Agricultural Economist, Department of Agricultural Economics, Clemson Agricultural College.

The Florida and Arkansas Agricultural Experiment Stations have published reports based on some of the data presented here. These are:

"Production and Marketing Practices of Florida Pecan Producers," by D. L. Brooke, Agricultural Economics Mimeo Report No. 62-4, September 1961.

"The Pecan Industry in Arkansas--Marketing System and Production Cost," by D. E. Farris, R. L. Taylor and E. J. Allen. In process.

This is one of a group of USDA reports dealing with various aspects of the pecan industry. The first report was:

"The Pecan Shelling and Processing Industry--Practices, Problems, Prospects," by Jules V. Powell and Donn A. Reimund, Agricultural Economics Report No. 15, September 1962.

CONTENTS

Washington, D. C. September 1963

SUMMARY

Pecans are an important source of income to growers throughout the southern tier of States from North Carolina to New Mexico. The total crop of pecans consists of nuts from both seedling and improved pecan trees. The size of the crop varies widely from year to year. Quality also varies among production areas in any given year and from year to year. Total production of pecans has trended upward and improved varieties are an increasing share of the total crop.

This report presents production and marketing data obtained from pecan growers in Arkansas, Florida, Georgia, Mississippi, New Mexico, and South Carolina. Data were obtained from 576 pecan growers who owned 370,000 pecan trees, or 13 percent of the trees listed in the 1959 Census of Agriculture for the 6 States.

In 1961, 89 growers expressed intentions to plant over 38,000 trees, while 61 growers planned to remove about 4,000 trees, mostly for reasons beyond their control. If growers follow through on these intentions, it will result in a 9 percent increase in the number of trees on the farms surveyed.

The most common cultural practice in pecan orchards was discing. Georgia growers disced 71 percent of the acreage studied in that State, but the average for 5 States was 53 percent of the acreage surveyed. Removing dead and pruned wood was the second most important orchard practice, and was carried out on about 42 percent of the pecan acreage.

Information on insect and disease control practices was obtained from 359 producers who owned 25,000 acres of pecans. Of these, only 57 sprayed or dusted their trees; yet, these growers owned 43 percent of the acreage. Growers sprayed or dusted for aphids, scale, scab, nut casebearers, and caterpillar worms. Costs of material, per acre treated, ranged from $2.30 in Florida to $8.89 in New Mexico, and averaged $7.26. These data are averages which include non-sprayed groves. Large commercial growers in the Southeast, where scab is a serious problem, report that spraying for scab costs approximately $25 per acre.

Growers reported fertilizing almost 20,000 acres, or 78 percent of the survey acreage. Commercially mixed complete fertilizer was most commonly used in all States, except Mississippi where nitrogen fertilizers were used most.

Total man-hour requirements averaged 31.7 hours per acre and power-hour requirements averaged 4.3 hours. Of these, 7.2 man-hours and 2.4 power-hours were required for pre-harvest operations; 24.5 man-hours and 1.9 power-hours were required for harvest operations.

Growers in the 6 States reported that 95 percent of their pecans were sold to dealers, 2 percent were still on hand at the time of the surveys, 1.5 percent were given away, 1 percent were sold retail, and 0.5 percent were used on the place of production.

The percentage of total farm incomes derived from sales of pecans varied widely, but did not average more than 50 percent in any State. In New Mexico,

pecans accounted for nearly 40 percent of total farm incomes; South Carolina growers reported that pecans accounted for only 11 percent of total farm income.

Thirteen percent of the growers interviewed belonged to an association of pecan growers. Thirty percent of the Georgia pecan growers belonged to the Southeastern Pecan Growers Association. Seven percent belonged to a cooperative marketing organization. Approximately 25 percent of the Arkansas growers marketed their pecans through a cooperative. None of the New Mexico growers belonged to associations or marketed through cooperatives. Pecan growers in South Carolina displayed little interest in grower associations or cooperatives. Only 2 percent belonged to an association; only 5 percent marketed through cooperatives.

Indications are that, during the next decade, per capita supply of pecans will fluctuate around the present level, and the farm price of pecans will follow rising consumer incomes.

ECONOMIC ASPECTS OF PECAN PRODUCTION AND MARKETING: ARKANSAS, FLORIDA, GEORGIA, MISSISSIPPI, NEW MEXICO, AND SOUTH CAROLINA

by

Robert C. McElroy and Jules V. Powell 1/
agricultural economists
Economic Research Service

INTRODUCTION

The production of pecans is as varied as the area in which they are produced. Pecans are native to an area extending from eastern Alabama to the western highlands of Texas and Oklahoma and from the Gulf Coast north to southern portions of Missouri, Illinois, and Indiana. Throughout this area, pecan trees grow in the natural forests and on the alluvial plains of principal rivers.

Over the years, from the time of the earliest settlers, pecan trees have been planted east of the native belt in Florida, Georgia, and the Carolinas, and west of it in New Mexico and Arizona. Most of the trees planted outside the native belt are planted in groves or orchards and around home sites. Large pecan groves have been planted also throughout the native belt.

The only data available concerning the number of pecan trees are in the United States Census of Agriculture. Census estimates indicate the concentrations and patterns of pecan trees throughout the South (figs. 1 and 5).

The total production of pecans each year comes from both seedling and improved trees, which are predominantly named varieties. In recent years, the average total crop has consisted of approximately equal portions of seedling and improved pecans. Seedling pecans predominate in Arkansas, Louisiana, Texas, and Oklahoma; improved pecans predominate in Alabama, Georgia, Florida, the Carolinas, and New Mexico.

Coming as it does from both seedling and improved trees, from widely scattered areas, and from varied cultural environments, the pecan crop varies widely in quality from one production area to the next. In addition, pecan trees tend to have a biennial production pattern; consequently, size of the crop varies widely from year to year (fig. 2). The cumulative effect of highly variable quality and quantity in any year and from one year to the next results in widely fluctuating prices.

In recent years, State agricultural experiment stations and the Federal-State extension services have urged pecan growers to follow regular spraying and fertilizing programs on pecan trees to raise the quality of pecans harvested, to increase yields, and to reduce the variability of yields from year to year.

1/ Mr. McElroy is in the Farm Production Economics Division; Mr. Powell the Marketing Economics Division.

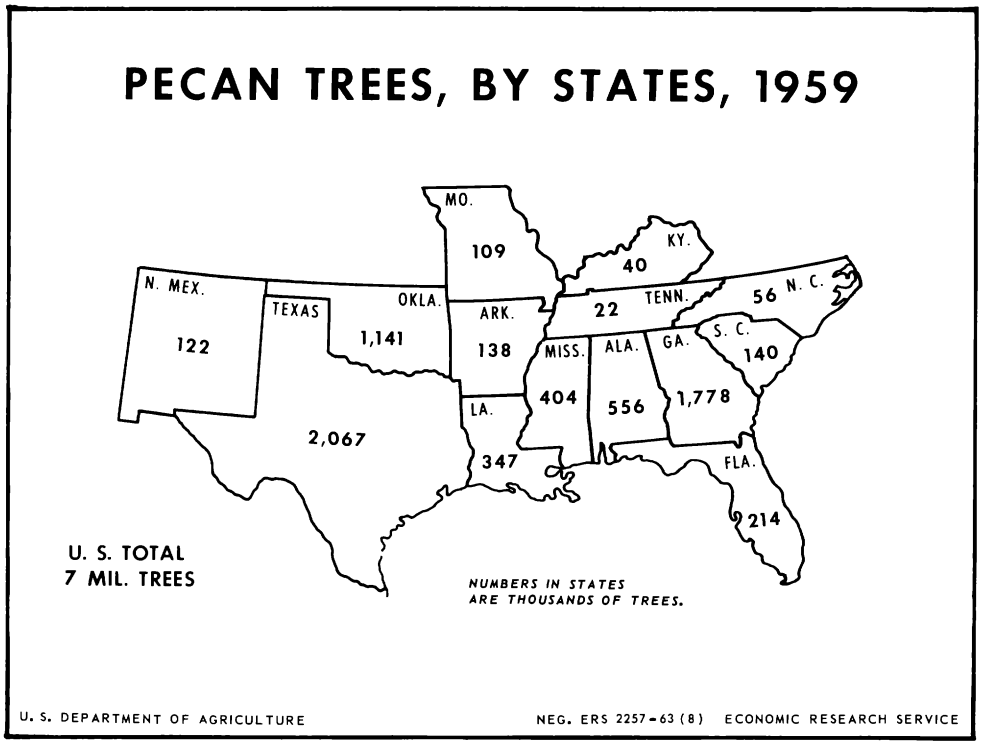

Figure 1

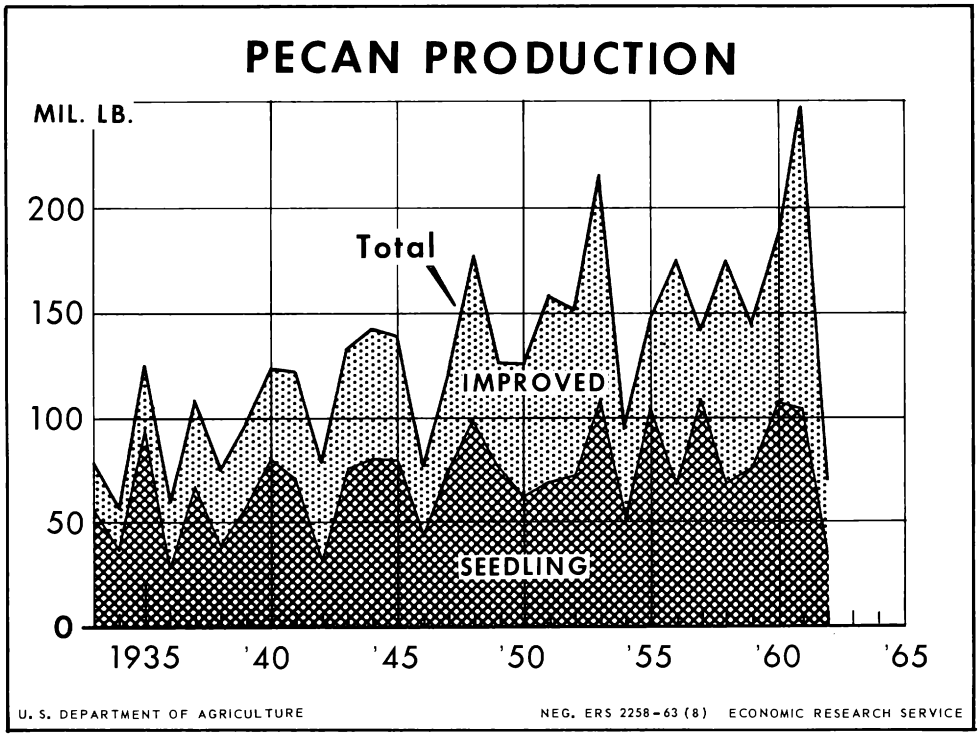

Figure 2

With the exception of some large commercial growers, however, their efforts appear to have met with only limited success. Growers who have a small number of trees around their homes, or scattered over their farms, generally have not adopted the recommended practices.

The purposes of this study are: (1) to describe the extent to which growers cultivate their pecan orchards, and the cultural programs followed, and (2) to determine how pecans are marketed at the farm level.

Method and Scope

The States in which the study was made were Arkansas, Florida, Georgia, Mississippi, New Mexico, and South Carolina. Personnel of the 6 State agricultural experiment stations conducted surveys of pecan growers during the summer and fall of 1961. Data were collected for the 1960 pecan crop. Information from each State was combined for this report. Each of the States used similar sampling procedures and followed a suggested interview schedule. The combined production of the participating States accounted for a little over 40 percent of total U.S. production in 1960 and more than 50 percent in both 1961 and 1962. However, the sample was not designed so that the results would be representative of all U.S. pecan growers and pecan production.

The number of pecan growers interviewed ranged from 13 in New Mexico to 217 in South Carolina and totaled 576 for the 6 States (table 1). These growers owned approximately 354,000 improved and 20,000 seedling trees, or about 13 percent of all trees listed in the 1959 Census of Agriculture for the 6 States. This percentage ranged from 8 in Mississippi to 82 in New Mexico. Improved varieties were dominant on the survey farms.

PRODUCTION

Trees Per Acre and Age of Trees

In addition to trees planted in orchards or groves, the survey included those planted around houses and along stream banks. For those planted in groves, the average number of trees per acre was 14, and ranged from 9 in Arkansas to 23 in New Mexico. For the other 4 States, the range was from 12 to 14. About 96 percent of the pecan trees in New Mexico are grown on irrigated land which, in addition to heavy pruning and intensive cultivation, makes possible the greater number per acre than in other States (table 2).

The ages of almost all trees in the sample were accounted for except in Arkansas and Georgia. Arkansas had 44 percent in the "Unknown" category and Georgia 62 percent. Arkansas had 18.6 percent of its trees in the 0-10 years age group. New Mexico had about 11 percent in this group and almost all of the rest, 86.7 percent, in the 20-30 year age group. The 31-40 age group predominated in Florida, Mississippi, and South Carolina. Most of the trees with known age in Georgia were over 40 years old.

Table 1.--Proportion of pecan trees sampled by States, 1960-61

State	Interviews	Number of trees reported				Percent of Census trees covered by survey		
		1959 Census of Agriculture		1961 Survey				
	Number	Improved	Seedling	Improved	Seedling	Improved	Seedling	Total
Arkansas	56	79,620	58,318	23,388	2,965	29	5	19
Florida	100	147,858	66,028	16,928	2,940	11	4	9
Georgia	100	1,626,069	152,206	170,959	7,782	11	5	10
Mississippi	90	318,518	85,581	29,939	4,396	9	5	8
New Mexico	13	121,709	184	99,610	810	82	1/	82
South Carolina	217	115,197	24,422	13,306	1,113	12	5	10
Total	576	2,408,971	386,739	354,130	20,006	15	5	13

1/ More seedling trees reported in this survey than in the 1959 Census of Agriculture

Table 2.--Acres of pecans, trees per acre, and age of trees sampled, by States, 1960-61

State	Acres	Average trees per acre	Percent of trees by age groups (years)					
			0-10	11-20	21-30	31-40	41 or over	Unknown
	Number	Number	Percent					
Arkansas	2,953	9	18.6	9.4	14.1	11.8	2.1	44.0
Florida	1,449	14	7.0	6.5	32.2	38.7	14.7	.9
Georgia	13,937	13	1/	2.7	5.1	12.6	17.6	62.0
Mississippi	2,798	12	10.9	4.5	22.5	35.2	26.4	.5
New Mexico	4,327	23	11.4	.3	86.7	0	0	1.6
South Carolina	1,017	14	7.3	14.3	21.0	47.7	9.0	.7
Six States	26,481	14	6.0	3.3	31.3	14.0	12.1	33.3

1/ Schedules for orchards with trees 10 years old or less were kept by the Georgia Station for a study of the cost of establishing pecan orchards. Therefore, the 100 schedules represented here are for trees older than 10 years.

Varieties

The Stuart variety predominated in all survey States except New Mexico where Schley and Bradley, together, made up 83 percent of the trees. Other leading improved varieties were Success, Mahan, Moneymaker, Moore, Curtis, and Van Deman (table 3). The "Desirable" variety is important in the "other improved" category, especially in Georgia, where large plantings of Desirable pecans have been made.

Trees of Bearing and Non-Bearing Age

About 87 percent of the trees in the survey were of bearing age, or over 10 years old (table 4).2/ Ten years is about the age when pecan trees commence to bear. The smaller proportion of trees considered of non-bearing age (table 4) than are listed in the 0-10 year age group (table 2) indicate some production was obtained from trees under that age in both New Mexico and South Carolina. Apparently, a high proportion of young trees in Arkansas and some in Florida and Mississippi are included in the unknown age group.

The proportion of bearing age trees ranged from about 69 percent of the trees reported in Arkansas to 94 percent in South Carolina. Ninety-three percent of the Florida trees, and approximately 89 percent of those in New Mexico and Mississippi were of bearing age.

Sixty-one growers in the 6 States planned in 1961 to remove more than 4,000 trees, but 89 growers planned to plant more than 38,000 trees (table 5). If growers followed through with these plans, the net result would be an increase of 9 percent, or about 34,000 additional trees on these farms. Growers in Arkansas and New Mexico planned to plant the largest number of trees.3/

Since 13 percent of all trees are not yet of bearing age, pecan production can be expected to increase in the years ahead. Additional increases in production will also occur if growers follow through on their expressed intentions to plant more trees than they remove. Projecting on this basis, increased production will be greatest in Arkansas, New Mexico, and Mississippi. Slight increases will occur in Florida and South Carolina.

In projecting production, later, no adjustment is attempted for removal of trees during the 10 years required for all of the present non-bearing age trees to come into production. Some trees undoubtedly will be removed during this period, thereby reducing production. Increased production resulting from continued use of fertilizer, spray, and cultural practices advocated by Federal and State Extension Service personnel, however, will likely more than offset the production loss caused by tree removal.

2/ Georgia is excluded from this estimate because the data collected from Georgia related only to trees of bearing age.

3/ Apparently New Mexico growers followed through on their intentions. A survey conducted by the New Mexico Crop and Livestock Reporting Service found there were 195,000 trees of all ages in New Mexico in 1962.

Table 3.--Number and percent of survey trees by variety, 6 States, 1960-61

Variety	Arkansas		Florida		Georgia		Mississippi		New Mexico		South Carolina		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Stuart	12,461	47.3	3,547	17.8	69,892	39.1	17,716	51.6	0	0	8,594	59.6	112,210	30.0
Bradley	0	0	0	0	0	0	0	0	17,980	17.9	0	0	17,980	4.8
Success	2,144	8.1	441	2.2	2,735	1.5	4,517	13.2	0	0	616	4.3	10,453	2.8
Schley	767	2.9	851	4.3	34,808	19.5	2,642	7.7	65,683	65.4	1,913	13.3	106,664	28.5
Mahan	2,030	7.7	770	3.8	1,316	.7	1,557	4.5	0	0	495	3.4	6,168	1.6
Moneymaker	1,012	3.8	1,948	9.8	9,167	5.1	102	1/	0	0	314	2.2	12,543	3.4
Moore	0	0	3,544	17.7	7,094	4.0	10	1/	0	0	0	0	10,648	2.9
Curtis	100	1/	2,377	12.0	321	1/	4	1/	0	0	2	1/	2,804	0.7
Van Deman	181	.7	322	1.6	4,882	2.7	53	1/	0	0	241	1.7	5,679	1.5
Other improved varieties	4,693	17.8	3,128	15.9	40,744	22.8	3,338	9.7	15,947	15.9	1,131	7.8	68,981	18.5
Total improved	23,388	88.7	16,928	85.1	170,959	95.6	29,939	87.2	99,610	99.2	13,306	92.3	354,130	94.7
Seedling	2,965	11.3	2,940	14.9	7,782	4.4	4,396	12.8	810	.8	1,113	7.7	20,006	5.3
Total	26,353	100.0	19,868	100.0	178,741	100.0	34,335	100.0	100,420	100.0	14,419	100.0	374,136	100.0

1/ Less than 0.5 percent

Table 4.--Number and proportion of pecan trees of bearing and non-bearing age, 5 States, 1960-61 1/

State	Trees		Proportion of trees	
	Bearing age	Non-bearing age	Bearing age	Non-bearing age
	Number	Number	Percent	Percent
Arkansas	18,208	8,145	69.1	30.9
Florida	18,433	1,435	92.8	7.2
Mississippi	30,403	3,932	88.5	11.5
New Mexico	89,288	11,132	88.9	11.1
South Carolina	13,488	931	93.5	6.5
Total	169,820	25,575	86.9	13.1

1/ Georgia schedules included only trees of bearing age. Therefore, data for that State are not included.

Table 5.--Growers' intentions to plant or remove pecan trees, 6 States, 1960-61

State	Trees in survey	Intention to:				Net increase 1/	
		Plant trees		Remove trees			
		Growers	Trees	Growers	Trees		
	Number	Number	Number	Number	Number	Number	Percent
Arkansas	26,353	12	18,621	12	186	18,435	70.0
Florida	19,877	11	1,003	8	20	983	4.9
Georgia	178,741	17	3,485	18	2,870	615	0.3
Mississippi	34,335	26	3,892	15	1,034	2,858	8.3
New Mexico	100,420	4	10,712	0	0	10,712	10.7
South Carolina	14,412	19	356	8	131	225	1.6
Total	374,138	89	38,069	61	4,241	33,828	9.0

1/ Increase over number of trees covered in these surveys.

Production, Yield, and Percent of Income

The 576 growers interviewed produced 11.7 million pounds of pecans in 1960 from 348,561 bearing age trees for an average yield of 33.7 pounds per tree. Sale of these pecans accounted for 23 percent of the total farm income of these growers.

Ninety-one percent of the 1960 pecan crop covered by these surveys was produced by the group of growers owning 500 or more trees each. Average yield per tree of this group was 34.7 pounds of pecans. These figures were influenced greatly, however, by four large growers in New Mexico who produced 66 percent of the total production. These four owned almost 88,000 trees and produced 99 percent of New Mexico's production at an average yield of 88.4 pounds per tree (table 6).

Growers with more than 500 trees produced 92 percent of the crop covered by the survey in Georgia, 61 percent in Mississippi, and 55 percent in Arkansas. Growers with more than 500 trees accounted for 32 percent of production in South Carolina, and 29 percent in Florida.

Growers owning 50 to 100 trees accounted for 14 percent of production in Florida, 6 percent in Mississippi, 5 percent in South Carolina, 3 percent in Arkansas, and less than one-half of 1 percent in Georgia and New Mexico.

The percentage of grower's farm incomes derived from pecan sales ranged from 1 percent for growers with less than 25 trees to 26 percent for growers with 500 or more trees. The average was 23 percent for all growers surveyed in the 6 States.

Cultural Practices and Cover Crops in Pecan Orchards

Discing was the most common cultural practice on pecan orchard acreage (table 7). The proportion of orchard acreage disced ranged from 8 percent in New Mexico to 71 percent in Georgia. Florida growers disced 70 percent, Mississippi growers 41 percent, and Arkansas growers 37 percent of their orchard acreage. In total, 209 of the 359 growers interviewed in 5 States disced 53 percent of the orchard acreage surveyed. Removing dead and pruned wood was second in importance among orchard cultural practices, and was performed on about 42 percent of the total acreage. Nineteen percent of the total orchard acreage was pruned, mowed, and irrigated. Almost all of the irrigation was in New Mexico. Twenty growers plowed and two growers, one in New Mexico, and one in Florida hoed around trees.

Most growers had some kind of cover crop, ranging from native grasses to various types of improved grasses and small grains. Fifty-eight growers seeded 49 percent of the pecan acreage with cover crops. This percentage was influenced greatly by growers in New Mexico who seeded 93 percent of their acreage. Florida growers seeded 38 percent, Arkansas growers 27 percent, and Mississippi growers 10 percent of their pecan acreage with cover crops. Sixteen growers in the 4 States plowed for cover crops, 34 disced, and 3 used cultivators. Data were not obtained for South Carolina.

Table 6.--Production of pecans, and percent of grower's income derived from pecan sales with varying numbers of trees

State and number of trees	Number of growers	Total number of trees		Total Production			Percent of growers incomes
		Bearing age	Non-bearing age	Total pounds	Pounds per tree	Percent of total	
Less than 10 trees							
Arkansas	2	14	---	200	14.3	1/	2/
Florida	---	---	---	---	---	---	---
Georgia	---	---	---	---	---	---	---
Mississippi	---	---	---	---	---	---	---
New Mexico	---	---	---	---	---	---	---
South Carolina	141	283	164	2,824	10.0	3	---
Total	143	297	164	3,024	10.2	1/	2/
10 to 25 trees							
Arkansas	4	41	32	2,965	72.3	1/	2/
Florida	6	124	7	670	5.4	1	2
Georgia	---	---	---	---	---	---	---
Mississippi	1	15	---	360	24.0	1/	1
New Mexico	---	---	---	---	---	---	---
South Carolina	24	246	77	1,456	5.9	1	1
Total	35	426	116	5,451	12.8	1/	1
25 to 50 trees							
Arkansas	7	234	---	13,708	58.6	2	34
Florida	28	918	70	11,475	12.5	11	7
Georgia	---	---	---	---	---	---	---
Mississippi	10	356	5	23,120	64.9	3	9
New Mexico	---	---	---	---	---	---	---
South Carolina	10	337	---	3,650	10.8	3	2/
Total	55	1,845	75	51,953	28.2	1/	8
50 to 100 trees							
Arkansas	8	560	20	25,350	45.3	3	38
Florida	31	1,930	72	14,248	7.4	14	14
Georgia	7	507	---	3,922	7.7	1/	31
Mississippi	12	875	---	51,995	59.4	6	34
New Mexico	1	50	---	1,200	24.0	1/	5
South Carolina	5	358	50	5,595	15.6	5	15
Total	64	4,280	142	102,310	23.9	1	23
100 to 500 trees							
Arkansas	23	4,158	1,082	304,780	73.3	40	18
Florida	27	5,391	561	45,080	8.4	45	13
Georgia	38	10,461	---	165,528	15.8	8	20
Mississippi	44	8,224	497	275,672	33.5	30	32
New Mexico	8	1,246	32	57,647	46.3	1	39
South Carolina	32	5,554	340	62,126	11.2	56	4
Total	172	35,034	2,512	910,833	26.0	8	21
500 trees and over							
Arkansas	12	13,202	7,010	421,917	32.0	55	30
Florida	8	10,070	725	29,616	2.9	29	14
Georgia	55	167,773	---	1,834,714	10.9	92	28
Mississippi	23	20,933	3,430	557,093	26.6	61	26
New Mexico	4	87,992	11,100	7,778,000	88.4	99	48
South Carolina	5	6,710	300	34,737	5.2	32	7
Total	107	306,680	22,565	10,656,077	34.7	91	26
Total all trees							
Arkansas	56	18,208	8,145	768,920	42.2	100	23
Florida	100	18,433	1,435	101,089	5.5	100	11
Georgia	100	178,741	---	2,004,164	11.2	100	25
Mississippi	90	30,403	3,932	980,240	29.9	100	28
New Mexico	13	89,288	11,132	7,836,847	87.8	100	39
South Carolina	217	13,488	931	110,388	8.2	100	11
Total	576	348,561	25,575	11,729,648	33.7	100	23

1/ Less than 0.5 percent.
2/ Percentage so small growers made no estimate.

Table 7.--Cultural practices on pecan orchards and orchard cover crops in 5 States, 1960-61

Practice	Arkansas		Florida		Georgia		Mississippi		New Mexico		5 States	
	Growers	Proportion of survey acres treated	Growers	Proportion of survey acres treated	Growers	Proportion of survey acres treated	Growers	Proportion of survey acres treated	Growers	Proportion of survey acres treated	Growers	Proportion of survey acres treated
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Orchard												
Prune	7	8	26	29	38	23	19	23	8	11	98	19
Remove wood	7	24	28	22	67	64	28	16	7	11	137	42
Plow	1	1	12	14	4	1	3	1	0	0	20	1
Disc	9	37	64	70	75	71	53	41	8	8	209	53
Mow	0	0	9	6	16	28	20	21	2	4	47	19
Hoeing	0	0	1	1	0	0	0	0	1	2/	2	2/
Irrigate	3	19	1	1	0	0	1	2/	13	100	14	19
Other 1/	12	5	1	1	20	5	0	0	3	7	35	5
Cover crop												
Plow	1	17	13	9	*	*	0	0	2	2/	16	6
Disc	2	1	20	19	*	*	10	7	2	3	34	5
Seed	8	27	25	38	*	*	20	10	5	93	58	49
Cultivate	0	0	3	5	*	*	0	0	0	0	3	1

1/ Includes such practices as setting out, thinning, grafting, tying, and demossing trees.
2/ Less than 0.5 percent.

* Asterisk means data were not obtained.

Note: See table 1 for total number of grower interviews, by States.

Insect and Disease Control Practices

Information on insect and disease control practices was obtained from 359 producers, in 5 States, who owned over 25,000 acres of pecans (table 8). These data were not obtained for South Carolina. Fifty-seven growers treated their pecan orchards for insects and diseases. Those treating their orchards were, in most instances, the larger producers; they treated 43 percent of the pecan acreage surveyed in those States. The proportion of acreage treated ranged from 29 percent of the acreage in Florida to 96 percent in New Mexico. Thirty percent was treated in Georgia, 32 percent in Mississippi, and 42 percent in Arkansas.

Aphids, scale, scab, nut casebearers, and caterpillar worms were the most common reasons for spraying or dusting. Systox was most commonly used for aphids, oil emulsion for scale, and cyprex or zerlate for scab.4/ Malathion and DDT were most commonly used to control pecan nut casebearers, and toxaphene and DDT were used to control caterpillar worms.

The average number of applications for all acres treated ranged from one in Florida to 2.7 in New Mexico. The cost of material per acre treated varied, of course, with the type of material used and the number of applications per acre. The cost per acre treated ranged from $2.30 per acre in Florida to $8.89 in New Mexico, and averaged $7.26 for the five States. These figures are averages, of course, and are not considered adequate for the Southeast, where scab is a serious problem. Large commercial growers in the Southeast use 5 applications of dodine at 2 pounds per acre per application to control scab. Total season cost of the dodine spray is approximately $25 per acre.

Fertilizer Practices on Pecan Orchards

Of 359 growers interviewed, 237 reported fertilizing almost 20,000 acres, or 78 percent of the survey acreage.5/

A commercially mixed complete fertilizer was applied by 184 of the growers on about 69 percent of the acreage. Commercially mixed complete fertilizer was used on the greatest proportion of survey acreage in four States. Mississippi growers applied nitrogen on 58 percent of their acreage. Nitrates were applied on about 14 percent of all survey acreage, and lime on about 9 percent. Other fertilizer elements were less widely used (Appendix table 13). Fertilizer data were not obtained for South Carolina.

4/ When the insecticides mentioned in this publication are used in practice, proper precautions should be observed to protect humans, farm animals, and wildlife as noted on the label.

5/ All fertilizer data are for total pounds, including nutrients and filler. Fertilizer formulas varied widely within and between States.

Table 8.--Insect and disease control practices on pecan orchards, 5 State, 1960-61

Item	Arkansas	Florida	Georgia	Mississippi	New Mexico	5 States
Total interviews (number)	56	100	100	90	13	359
Total survey acres (number)	2,953	1,449	13,937	2,798	4,327	25,464
Producers who treated some part of orchard: (number)	13	11	9	17	7	57
Spray	10	9	6	16	7	48
Dust	3	2	3	1	--	9
Total acreage treated (number)	1,252	417	4,212	893	4,160	10,934
Percentage of survey acres treated (number)	42	29	30	32	96	43
Most common reason of treatments; prinicpal kind of material used (in parenthesis)	Scale (oil emulsion) Scab (cyprex) Nut casebearer (DDT)	Scab (zerlate) Caterpillar worms (DDT and toxaphene) Moss (Bordeaux mix)	* * *	Scale (oil emulsion) Nut casebearer (malathion)	Aphids (systox)	* *
Average number applications per acre treated (number)	2.6	1.0	2.1	1.6	2.7	2.3
Average cost of material per acre treated (dollars)	$3.60	$2.30	$7.26	$7.10	$8.89	$7.26

* Data not obtained.

Grazing in Pecan Orchards

Forty percent of the growers reported grazing livestock on pecan acreage (table 9). These producers owned the larger acreages, however, as they grazed about 77 percent of the total acreage surveyed.

The highest proportion of acreage grazed was in New Mexico where five growers reported livestock, including chickens and geese, on about 96 percent of the acreage. The percent of survey acreage grazed in the other States was: Mississippi 76, Georgia 74, Arkansas 72, South Carolina 69, and Florida 64 percent.

Table 9.--Livestock grazing in pecan orchards, 576 producers, 6 States, 1960-61

State	Growers interviewed	Total acres in survey	Growers reporting grazing in orchards	Acres grazed	Percent of total acres grazed
	Number	Acres	Number	Acres	Percent
Arkansas	56	2,953	28	2,140	72
Florida	100	1,449	55	925	64
Georgia	100	13,937	71	10,257	74
Mississippi	90	2,798	56	2,138	76
New Mexico	13	4,327	5	4,144	96
South Carolina	217	1,017	26	706	69
Six States	576	26,481	241	20,310	77

Labor and Power Requirements for Producing Pecans

Man and power time requirements used in performing one or more pre-harvest operations were reported by 313 growers; 321 reported time requirements for one or more harvest operations.

An average of 31.7 man- and 4.3 power-hours was required per survey acre; 7.2 man- and 2.4 power-hours for pre-harvest operations; 24.5 man- and 1.9 power-hours for harvest operations (Appendix table 14).

Complete labor and power requirements were obtained for Mississippi and New Mexico. While these data cannot be projected to all States, adequate data were obtained in enough States for representation of a number of operations. Therefore, all of the data obtained were aggregated as well as presented by State. Detailed costs of establishing pecan orchards, and annual production costs are analyzed in the Arkansas report.

MARKETING

A major portion of the pecan crop is sold to the first buyer within a few miles of the place of production. A study in 1958 in Oklahoma disclosed that most pecans were sold to the first buyer within 5 miles of the place of production.6/ When asked to explain their preferences for certain market outlets, "Going to town" was almost as important as "Best price." The principal outlets were feed stores, general stores, and produce stores.

The findings of this study indicate that growers with small quantities of pecans sell to the nearest buyer, usually a dealer who may or may not be affiliated with a sheller. Growers with large quantities of pecans of similar varieties are able to attract buyers to their farms, and may bargain with buyers on price. If the grower has very large quantities of pecans, he usually sells directly to shellers.

Disposition.--Farmers in the 6 States sold 95 percent of their pecans to dealers, truckers, shellers and other outlets. Only 1 percent was sold retail, 1.5 percent was given away, 0.5 percent was used at home and 2 percent was still on hand at the time of the interviews. Most pecans are sold during November and December, but some growers with storage facilities hold their pecans if they expect an increase in prices. Some pecans were still being held by growers in Arkansas, Florida, and Georgia in the early summer of 1961. Surveys were made in the other States in late summer and early fall, and there were no reports of pecans in farm storages (table 10).

South Carolina farmers led all others in the amount of pecans used at home, given away, and sold retail. Farmers in New Mexico sold nearly all of their pecans directly to shellers. This reflects the degree of specialization in pecan production in the two States. Most of the pecans in South Carolina are produced in small groves, and income from the sale of pecans accounted for only 11 percent of the total farm income. New Mexico growers are clustered around the largest producer of pecans who is also a large sheller and marketer of pecan kernels. New Mexico growers obtained nearly 40 percent of their total farm income from pecan sales.

Retail Sales.--Retail sales of in-shell pecans ranged from 0.5 percent of total sales in Florida and New Mexico to 3.5 percent in South Carolina. In quantity, however, growers in Georgia and Mississippi sold more pounds of pecans by mail order than were sold retail by other methods in all of the other States combined (table 11). Growers in Georgia sold 17,000 pounds through mail orders at an average price of 66 cents per pound. Mississippi growers sold more pecans through mail orders but their average price was 54 cents and their total revenue less than in Georgia.

Of 55,000 pounds of in-shell pecans sold at retail in the 6 States, 71 percent was sold through mail orders. Twenty percent was sold at orchards and 9 percent at roadside stands. The average prices received per pound were 59 cents

6/ Chappell, Joe Senter. An Analysis of Some Economic Factors Affecting the Marketing of Oklahoma Pecans. M.S. Thesis, Okla. Expt. Sta., May 1959.

Table 10.--Disposition of the 1960 pecan crop, 576 growers and total crop, 6 States, 1960-61

State	Total crop	Survey crop	Percent survey of total	Disposition of survey crop									
				Used at home		Given away		On hand		Sold			
										Retail		Wholesale	
	Lbs.	Lbs.	Pct.	Lbs.	Pct.	Lbs.	Pct.	Lbs.	Pct.	Lbs.	Pct.	Lbs.	Pct.
Arkansas	10,500,000	764,984	7.3	3,490	0.5	24,178	3.2	48,700	6.4	9,777	1.3	678,839	88.6
Florida	1,800,000	109,629	6.1	2,855	2.6	3,160	2.9	3,520	3.2	509	0.5	99,595	90.8
Georgia	37,700,000	2,001,414	5.3	3,927	1/	6,335	1/	40,700	2.0	17,210	0.9	1,933,242	96.6
Mississippi	17,800,000	902,009	5.1	6,935	0.8	28,660	3.2	--	--	20,489	2.3	845,925	93.7
New Mexico	8,000,000	7,733,947	96.7	1,442	1/	1,498	1/	--	--	3,317	1/	7,727,690	99.1
South Carolina	4,300,000	109,805	2.6	4,194	3.8	4,136	3.8	--	--	3,850	3.5	97,625	88.9
Total	80,100,000	11,621,788	14.5	22,843	0.2	67,967	0.6	92,920	0.8	55,152	0.5	11,382,906	97.9

1/ Less than 0.5 percent.

Table 11.--Retail sales of pecans by growers, 6 States, 1960-61

State	Roadside stand			Mail order			At orchard and other		
	Quantity	Price	Value	Quantity	Price	Value	Quantity	Price	Value
	Pounds	Cents	Dollars	Pounds	Cents	Dollars	Pounds	Cents	Dollars
Arkansas	--	--	--	3,700	50	1,850	6,077	37	2,248
Florida	--	--	--	--	--	--	509	47	238
Georgia	--	--	--	17,000	66	11,200	210	32	67
Mississippi	1,955	56	1,095	18,284	54	9,953	250	35	88
New Mexico	2,867	43	1,133	--	--	--	450	40	180
South Carolina	415	43	178	--	--	--	3,435	39	1,339
Total or average	5,237	41	2,406	38,984	59	23,003	10,931	37	4,160

through mail orders, 41 cents at roadside stands, and 37 cents at orchards. The availability of retail outlets (except mail orders) to growers depends partly on the location of the pecan orchard and the amount of inexpensive labor available to the farmer.

Wholesale Sales.--Wholesale sales of pecans were tabulated by States and varieties (Appendix tables 15 through 20). Seedling pecans were sold in all States. Stuart and Success pecans were sold in all States except New Mexico.

Average prices for improved pecans were higher than for seedling pecans in all States. Of the improved pecans, the Schley variety usually commands the highest price. It has a high percentage of kernels and a high oil content. Prices for Schley pecans ranged from 34 cents in Arkansas to 41 cents in South Carolina. However, only 5,361 pounds of Schleys were sold by the South Carolina growers.

The Stuart pecan is by far the most prevalent variety. The average price for Stuart pecans was 35 cents in all States, except Georgia, where Stuarts sold for 36 cents.

The average price for seedling pecans ranged from 29 cents in Mississippi to 38 cents in New Mexico. However, the usual price was 30 or 31 cents. The lower price for seedling pecans is influenced by some low quality nuts obtained from wild trees. Pecans from seedling trees grown under cultivation often command prices comparable to those of the improved Success or Stuart varieties.

In all States, most of the pecans were marketed during November and December. This may vary somewhat from year to year, depending on weather conditions as most pecans are marketed at time of harvest which is influenced by weather. This may be in October in some years, and growers rarely delay harvesting after December because of the firm demand for pecans for the Christmas trade. In recent years, however, more pecans have been marketed after January, because the increased sales of shelled pecans have resulted in a more stable demand throughout the year. Often the grower price for pecans rises in February, and growers with storage facilities may hold pecans in anticipation of this price rise. Pecans that are permitted to lie unharvested on damp ground, however, lose quality quickly and bring low prices.

In all States except New Mexico, most sales were made to dealers. Most of the sales in New Mexico were made to the large grower-sheller in the area. Georgia growers made a high percentage of sales directly to shellers, but sales to dealers predominated.

Georgia had more pecan varieties than any other State. Some of these varieties are no longer considered desirable due to low yields, poor nut quality and susceptibility to diseases. The proliferation of varieties results from the large plantings made as part of land speculations in the 1920's. A gradual change to fewer and better varieties of pecans is expected in Georgia in the years ahead. But due to the beauty and long life of pecan trees, these changes come about slowly.

Grower Affiliations.--Twelve percent of the growers interviewed belonged to an association of pecan growers (table 12). Georgia growers led in membership

Table 12.--Grower membership in grower association or cooperative marketing agencies, 6 States, 1960-61

State	Respondents	Association members		Respondents	Cooperative members	
	Number	Number	Percent	Number	Number	Percent
Arkansas	55	6	11	55	11	20
Florida	100	20	20	99	17	17
Georgia	100	23	23	100	11	11
Mississippi	90	13	14	88	7	8
New Mexico	12	0	0	12	0	0
South Carolina	216	4	2	216	10	5
Total	572	66	12	570	46	8

in the Southeastern Pecan Growers Association; 23 percent of the growers interviewed in that State belonged. Twenty percent of the Florida growers and 14 percent of the Mississippi growers also belonged to the Association.

Eight percent of the growers interviewed belonged to a cooperative marketing organization. Cooperative marketing of pecans was not successful until 1950 when the Cotton Producers Association bought one of the largest pecan shelling firms in Georgia and established a marketing cooperative for pecans. The cooperative has become an increasingly important factor in the pecan marketing system during the past 12 years. Twenty percent of the Arkansas growers, 17 percent of the Florida growers, and 11 percent of the Georgia growers interviewed in 1961 belonged to the cooperative. Arkansas growers reported the cooperative had increased stability to the Arkansas pecan industry by broadcasting and publishing daily the prices offered for the various grades and varieties of pecans.

IMPLICATIONS

Farm Size and Efficiency

The 1959 Census of Agriculture shows that the number of farms reporting pecan trees declined from 94,568 in 1954 to 90,135 in 1959. This indicates a trend, well known in other segments of agriculture, towards fewer and larger farms. This trend generally leads to greater commercialization and with it increased efficiency of production.

This study shows that most pecans are produced by growers owning 500 or more trees. With exception of the large growers in New Mexico who irrigated, the study does not indicate that yields are higher for this group. No conclusion can be drawn here on the basis of a 1-year observation, however, because of the bi-annual bearing habit of pecans. Neither can the effects of fertilizer, spray,

and orchard culture practices be assessed from one observation. Thus, studies covering the same orchards over a period of several years are needed to determine these aspects of production.

Supply and Price Outlook

The outlook for the pecan industry is good, if per capita supplied do not exceed the present level; indications are, they will not during the next decade.

The total domestic supply of pecans in any one year consists of production, carry-over stocks, and net imports. A small quantity of pecans (an average of about one percent of total production) is exported annually, primarily to Canada; the quantity imported, from Mexico, is usually less. While carry-over stocks have an important influence on the quantity of pecans available in any given year, they do not affect supply over a period of several years. Consequently, production is the component of supply requiring investigation.

Pecan production is the yield from all bearing trees. Important factors influencing yield are number of trees of bearing age, variety of trees, insect and disease control practices, orchard cultural practices, and weather. With exception of the number and variety of trees of bearing age, these factors, particularly weather, vary widely from year to year. The bi-annual bearing pattern of pecans causes production to fluctuate even more widely from year to year. Thus, it is extremely difficult for anyone to forecase what production will be in any given future year.

Assuming the future effects of these causes of fluctuating production will be similar to those of the past, and knowing the approximate number of bearing age trees at a given time in the future; then, we can estimate the level around which production is likely to fluctuate. Information from the survey indicates that the number of bearing age trees, for the survey States, will increase by about 22 percent from 1961 to 1973.

While the sample design used in this survey was not calculated to make the results scientifically applicable to the U. S. pecan production, the participating States account for about half of the U. S. pecan supply. In addition, price is the most important factor influencing decisions to plant trees and there is little variation in the price of comparable nuts between producing States. Consequently, the planting of trees in other States probably closely parallels that of the States surveyed.

Production has continued to increase since 1925, but not at the same rate (figure 3). The increase was more rapid than population until the late 1940's, about paralleled population growth from then until the middle 1950's, then increased more slowly than population until 1962.

The projection to 1973 indicate that production will continue to increase more slowly than population until 1971; then, tend upward from 1971 to about 213 million pounds in 1973. However, the projections for 1971-73 are based on growers intentions, expressed in 1961 and following three years of high pecan

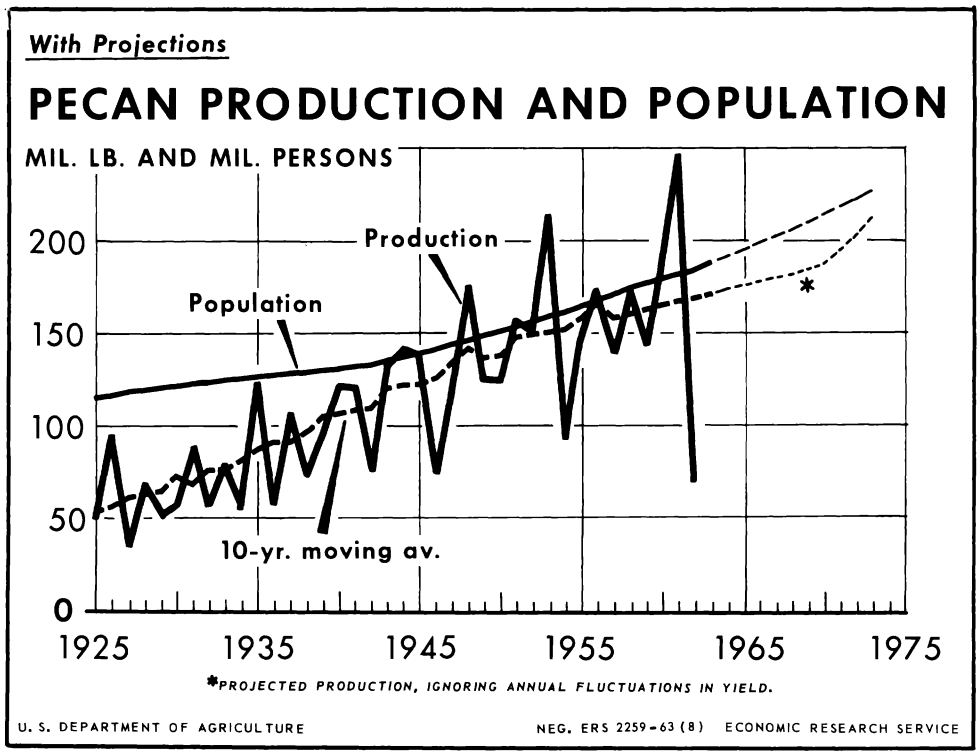

Figure 3

prices, to plant trees during the next two years. The low price received for the 1961 crop may have caused some growers to defer following through on those intentions.

Figure 4 shows production per person, of in-shell pecans, from 1925 to 1962 and projected per capita production from 1962 to 1973. Production per person rose rapidly from 1925 to 1948, leveled off until about 1956, then declined slightly until 1962. The projection indicates almost no change between 1962 and 1971; an increase in 1972 and 73 bringing per capita production up to about the 1953 level (10-year moving average line) of 0.94 pounds per person.

While the 10-year moving average line shows per capita production of pecans, it probably closely approaches consumption per person, for recent years, as improvements in processing and storage have had a leveling influence on supplies.

Fowler computed the price elasticity of demand for pecans to be -1.4 and the income elasticity to be 2.1.7/ Blaich 8/ has suggested a range in the price

7/ Fowler, Mark L. Projection and Price of Pecans in the United States to 1975. Okla. Agr. Expt. Sta., Tech. Bul. T-88, November 1960.

8/ Blaich, O. P. Strength of Demand for 120 Market Categories of Food, 1957-61. Univ. Calif., Agr. Ext. Serv., 1963.

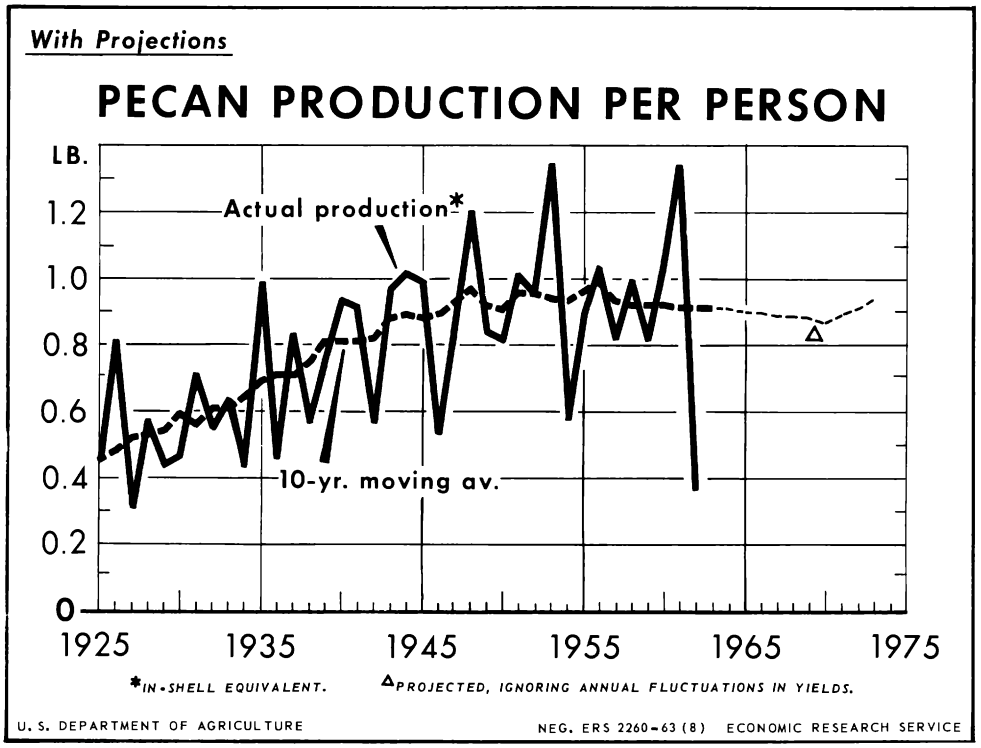

Figure 4

elasticity of demand from -0.9 to -1.7; the mean of this would approach Fowler's figure. This price elasticity of demand indicates pecans differ from most agricultural products in that an expansion of production would increase rather than decrease total industry receipts. Price per unit would decline with an expansion in production, but not drastically. The inverse of the price elasticity of demand of -1.4 gives a coefficient of price flexibility of 0.07. Thus, a 10 percent increase in pecan supply would decrease farm price by 7 percent, if there were no change in consumer income. Income is not likely to remain constant, however. Indications are that it will continue to increase. The 2.1 income elasticity of demand indicates that with a 1-percent increase in income, pecan consumption would increase by 2.1 percent, if the price of pecans remained unchanged.

Pecans have several close competitors, however, as they are only one of a group of edible nuts. Almonds, filberts, peanuts, and walnuts are produced domestically; brazil nuts, cashews, and chestnuts, and several miscellaneous nuts are imported. While a given type of nut may be best for some specific uses, they all substitute for each other to some degree. That is, a decrease in price of a given type nut, relative to prices of other nuts, results in greater quantities of it being used. It is apparent, therefore, that supplies and prices of other edible nuts will have an effect on the future price of pecans. However, Blaich's 8/ investigation indicated a strong demand for all domestic edible nuts.

REFERENCES

Bagby, John
1961. Pecan Production. Auburn Univ., Extension Service Cir. 426.

Brinson, F. R., Branson, R. E., Clark, W. W., Krezdorn, A. H., and Storey, J. R.
1959. Improved Grades and Consumer Demands for In-Shell Pecans. Texas A.E.S. Bul. 932.

Brooke, D. L.
1961. Production and Marketing Practices of Florida Pecan Producers. Fla. Agr. Expt. Sta., Agr. Econ. Mimeo Report No. 62-4.

Crane, H. L.
The Pecan. U.S. Dept. Agr., ARS-CA-34-87-62.

Ferree, Roy J., Musser, A. M., Nettles, W. G., and Youngblood, J. E.
1957. Pecan Production and Marketing in South Carolina. Clemson Agr. Col. cooperating with U.S. Dept. Agr., Cir. 301, 44 pp., illus.

_____, and Nettles, W. C.
1962. Pecan Pest Control in South Carolina. Clemson College and U.S. Dept. Agr., Cir. 484.

Firor, George H.
1960. Fruit Growing. Ga. Agr. Ext. Serv. Bul. 518, 27 pp., illus.

Fowler, Mark. L.
1960. Projections of Production and Price of Pecans in the United States to 1975. Okla. Agr. Expt. Sta. Tech. Bul. T-88, 34 pp., illus.

_____
1963. Analysis of Early-Season Pecan Production Forecasts. Okla. Agr. Expt. Sta., Proc. Ser. P-440, 18 pp., illus.

_____
1963. Factors Affecting Pecan Prices and Price Relationship in the United States. Okla. Agr. Expt. Sta. Tech. Bul. T-100, 26 pp., illus.

Gavett, Earle E.
1958. Labor Used for Fruit and Tree Nuts. U.S. Dept. Agr., Statis. Bul. 232.

Graves, Clinton H.
1962. New Developments in Pecan Disease Control, Miss. A.E.S. Inform. Sheet 742.

Hagler, T. B., Johnson, W. A., and Barwood, H. B.
1953. Factors Affecting Pecan Yields. Agr. Expt. Sta., Ala. Polytech. Inst. Cir. 115.

Harper, R. E. and Enzie, J. V.
1956. Pecan Production in New Mexico. N. Mex. Agr. Expt. Sta. Bul. 410, 27 pp., illus.

Hines, Chesley and Bennett, A. G.
1960. Mississippi Spray Calendar--Fruit and Pecan Pest Control. Miss. Agr. Ext. Serv., Pub. 184.

_____ and Gossard, Atherton C.
1959. Pecan Production. Miss. Agr. Ext. Serv., Pub. 297.

Livingston, R. L.
1960. Pecans in Georgia. Ga. Agr. Ext. Serv. Bul. 609, 24 pp., illus.

Osburn, M. R., Phillips, A. M., and Pierce, William C.
1954. Insects and Diseases of the Pecan and Their Control. U.S. Dept. Agr., Farmers' Bul. No. 1829.

Overcash, J. P. and Hines, Chesley
1958. Growing Fruit in Mississippi. Miss. Agr. Ext. Serv., Pub. 376, 39 pp., illus.

U.S. Department of Agriculture
1960. Fruits and Tree Nuts--Bloom, Harvesting, and Marketing Dates and Principal Producing Counties, By States. Agr. Mktg. Serv., Crop Rptg. Bd., Agr. Handbook No. 186, 125 pp., illus.

Wiesman, William L., Zarger, Thomas, Chase, Spencer, and Armstrong, W. D.
1958. Nut Tree Crops in Kentucky. Ky. Dept. Econ. Development, 22 pp., illus.

Woodroof, J. G. and Heaton, E. K.
1961. Pecans for Processing. Ga. Agr. Expt. Sta. Bul. N.S. 80, 91 pp., illus.

APPENDIX A

Table 13.--Fertilizer practices on pecan orchards, 5 States, 1960-61 survey

Type of material	Growers	Acreage fertilized or limed	Proportion of survey acres covered	Average rate per acre covered 1/
	Number	Acres	Percent	Pounds
Arkansas				
Commercially mixed fertilizer	12	797	27.0	177
Potash	0	0	0	0
Potash and phosphorous	1	30	1.0	200
Zinc sulfate	1	161	5.5	2
Manure	1	20	.7	2/
Nitrogen	7	202	6.8	204
Other 3/	2	19	.6	16,863
Florida				
Commercially mixed fertilizer	36	595	41.1	650
Potash	2	13	.9	254
Potash and phosphorous	3	38	2.6	761
Zinc sulfate	5	99	6.8	96
Manure	2	35	2.4	2,000
Lime	6	220	15.2	2,057
Nitrogen	5	19	1.3	170
Georgia				
Commercially mixed fertilizer	91	11,484	82.4	575
Potash	3	45	.3	228
Potash and phosphorous	1	20	.1	200
Zinc sulfate	15	1,025	7.4	66
Manure	2	26	.2	4,769
Lime	17	2,050	14.7	1,949
Nitrogen	34	1,617	11.6	306
Other 3/	1	170	1.2	765
Mississippi				
Commercially mixed fertilizer	37	660	23.6	680
Potash	4	37	1.3	196
Potash and phosphorous	3	23	.8	765
Zinc sulfate	1	21	.8	50
Manure	4	98	3.5	3,449
Lime	3	75	2.7	2,587
Nitrogen	36	1,623	58.0	307

See footnotes at end of table --continued

Table 13.--Fertilizer practices on pecan orchards, 5 States, 1960-61 survey--Continued

Type of material	Growers	Acreage fertilized or limed	Proportion of survey acres covered	Average rate per acre covered 1/
	Number	Acres	Percent	Pounds
New Mexico				
Commercially mixed fertilizer	8	4,153	96.0	186
Potash	0	0	0	0
Potash and phosphorous	1	12	.3	200
Zinc sulfate	2	140	3.2	20
Manure	2	104	2.4	4/ 36,000
Lime	0	0	0	0
Nitrogen	3	21	.5	314
Five States				
Commercially mixed fertilizer	184	17,689	69.5	472
Potash	9	95	.4	219
Potash and phosphorous	9	123	.5	479
Zinc sulfate	24	1,446	5.7	56
Manure 5/	11	283	1.1	15,954
Lime	26	2,345	9.2	1,980
Nitrogen	85	3,482	13.7	300
Other 3/	3	189	.7	2,383

1/ All fertilizer data are for total pounds, including nutrients and filler. Fertilizer formulas varied widely within and between States.
2/ Data not obtained.
3/ Primarily, cottonseed waste in Arkansas and "Pecan Special" in Georgia.
4/ Average for 100 acres, rate not obtained for 4 acres.
5/ The amount applied was not obtained for 20 acres in Arkansas nor for 4 acres in New Mexico; hence, average rate is for 259 acres.

Table 14.--Labor and power requirements in pecan orchards, 5 States, 1960-61

Operation	Arkansas						Florida					
	Number growers reporting	Proportion of survey: acres treated	Hours per acre done: Man	Hours per acre done: Power	Hours per acre total acres: Man	Hours per acre total acres: Power	Number growers reporting	Proportion of survey: acres treated	Hours per acre done: Man	Hours per acre done: Power	Hours per acre total acres: Man	Hours per acre total acres: Power
No preharvest	32	23.1	---	---	---	---	0	0	---	---	---	---
Preharvest	24	76.9	---	---	---	---	100	100.0	---	---	---	---
Pecan orchard:												
Pruning	7	7.8	2.9	0	.23	0	26	29.4	1.6	0	.47	0
Removing wood	7	23.9	.8	.5	.19	.12	28	21.9	1.0	1.0	.22	.22
Plowing	1	.7	1.5	1.8	.01	.01	12	14.3	1.6	1.6	.23	.23
Fertilizing	10	14.5	.7	.4	.10	.06	45	52.9	1.1	.6	.58	.32
Discing	9	36.8	10.4	10.4	3.83	3.83	64	70.3	1.1	1.1	.77	.77
Spraying 1/	5	11.9	1.0	.1	.12	.01	11	28.8	.6	.6	.17	.17
Dusting	0	---	---	---	---	---	1/	---	---	---	---	---
Irrigating	3	18.6	2.4	0	.45	0	1	.6	3/	3/	3/	3/
Mowing	0	---	---	---	---	---	9	6.1	2.1	2.1	.13	.13
Other 2/	12	4.7	11.6	.5	.55	.02	0	---	---	---	---	---
Cover crop:												
Plowing	1	16.9	.5	.5	.08	.08	13	9.0	1.7	1.7	.15	.15
Discing	2	1.0	1.8	1.8	.02	.02	20	19.0	.9	.9	.17	.17
Seeding	8	27.3	.9	.9	.25	.25	25	38.4	.7	.7	.27	.27
Fertilizing	0	---	---	---	---	---	20	39.3	1.1	.6	.43	.24
Total	56	100.0	---	---	5.83	4.40	100	100.0	---	---	4/	4/
No harvest	18	30.1	---	---	---	---	0	0	---	---	---	---
Harvest	38	69.9	---	---	---	---	100	100.0	---	---	---	---
Nuts removed by:												
Machine shaking	8	36.3	.9	.7	.33	.25	5	18.1	*	*	*	*
Hand shaking or knocking	7	1.0	4.6	0	.05	0	4	8.1	*	*	*	*
Falling naturally 5/	23	32.6	---	---	---	---	91	73.8	*	*	*	*
Nuts picked up by:												
Machine	3	5.9	.4	.4	.02	.02	*	*	*	*	*	*
Hand	35	64.0	3/	0	3/	0	*	*	*	*	*	*
Hauling	6	32.6	.3	.2	.10	.07	*	*	*	*	*	*
Other labor 6/	6	36.8	.8	.5	.29	.18	*	*	*	*	*	*
Total	56	100.0	---	---	4/	4/	100	100.0	---	---	---	---

See footnotes at end of table.

--Continued

Table 14.--Labor and power requirements in pecan orchards, 5 States, 1960-61--Continued

Operation	Georgia						Mississippi					
	Number growers reporting	Proportion of survey acres treated	Hours per acre done		Hours per acre total acres		Number growers reporting	Proportion of survey acres treated	Hours per acre done		Hours per acre total acres	
			Man	Power	Man	Power			Man	Power	Man	Power
No preharvest	0	0	---	---	---	---	14	19.0	---	---	---	---
Preharvest	100	100.0	---	---	---	---	76	81.0	---	---	---	---
Pecan orchard:												
Pruning	38	22.9	1.8	.2	.41	.05	19	23.3	2.2	0	.51	0
Removing wood	67	63.7	1.1	.4	.70	.25	28	16.1	1.8	1.5	.29	.24
Plowing	4	.8	1.3	1.3	.01	.01	3	.9	1.2	1.2	.01	.01
Fertilizing	92	86.6	.8	.4	.69	.35	64	61.5	.7	.6	.43	.37
Discing	75	71.0	1.2	1.1	.85	.78	53	40.7	1.0	1.0	.41	.41
Spraying 1/	7	27.9	.9	.7	.25	.20	17	32.6	.6	.7	.20	.23
Dusting	3	2.6	.3	.3	.01	.01	0	---	---	---	---	---
Irrigating	0	0	0	0	0	0	1	.4	13.3	1.5	.05	.01
Mowing	16	27.8	1.5	1.1	.42	.31	20	20.8	1.1	1.1	.23	.23
Other 2/	20	51.0	16.9	2.4	8.62	1.22	0	---	---	---	---	---
Cover crop:												
Plowing	*	*	*	*	*	*	0	0	---	---	---	---
Discing	*	*	*	*	*	*	10	6.6	.8	---	.05	.05
Seeding	*	*	*	*	*	*	20	10.0	.5	---	.05	.05
Fertilizing	*	*	*	*	*	*	0	0	---	---	---	---
Total	100	100.0	---	---	11.96	3.18	90	100.0	---	---	2.23	1.60
No harvest	11	4.8	---	---	---	---	6	10.4	---	---	---	---
Harvest	89	95.2	---	---	---	---	84	89.6	---	---	---	---
Nuts removed by:												
Machine shaking	18	42.4	1.4	.9	.59	.38	11	19.3	4.0	1.9	.77	.37
Hand shaking or knocking	8	4.7	4.0	0	.19	0	36	19.8	6.5	0	1.29	0
Falling naturally 5/	63	48.1	---	---	---	---	37	50.5	---	---	---	---
Nuts picked up by:												
Machine	0	0	0	0	0	0	0	0	0	0	0	0
Hand	89	95.2	3/	0	3/	0	80	83.0	32.0	0	23.87	0
Hauling	78	90.3	.6	.6	.54	.54	75	76.5	.9	.6	.69	.46
Other labor 6/	0	0	0	0	0	0	34	55.4	2.4	0	1.33	0
Total	100	95.2	---	---	4/	4/	90	100.0	---	---	27.95	.83

See footnotes at end of table

--Continued

Table 14.--Labor and power requirements in pecan orchards, 5 States, 1960-61--Continued

Operation	New Mexico						5 States					
	Number growers reporting	Proportion of survey acres treated	Hours per acre done		Hours per acre total acres		Number growers reporting	Proportion of survey acres treated	Hours per acre done		Hours per acre total acres	
			Man	Power	Man	Power			Man	Power	Man	Power
No preharvest	0	0	---	---	---	---	46	4.8	---	---	---	---
Preharvest	13	100.0	---	---	---	---	313	95.2	---	---	---	---
Pecan orchard:												
Pruning	8	10.7	4.9	0	.52	0	98	19.5	2.2	.1	.43	.02
Removing wood	7	10.6	2.2	1.7	.23	.04	137	42.5	1.2	.5	.51	.21
Plowing	0	0	0	0	0	0	20	1.4	1.5	1.5	.02	.02
Fertilizing	9	96.5	2.3	.3	2.22	.29	220	75.2	1.1	.4	.83	.30
Discing	8	7.6	2.8	2.3	.21	.17	209	52.7	2.0	1.9	1.05	1.00
Spraying 1/	6	96.1	1.2	1.1	1.15	1.06	46	38.2	1.0	.8	.38	.31
Dusting	0	0	0	0	0	0	3	1.4	.3	.3	.00	.00
Irrigating	9	96.0	14.4	.2	13.82	.19	14	18.6	13.0	.2	2.42	.04
Mowing	2	4.2	1.8	1.8	.08	.08	47	18.6	1.5	1.1	.28	.20
Other 2/	3	7.0	21.7	.3	1.52	.02	35	4.5	17.5	1.6	.79	.07
Cover crop:												
Plowing	2	.2	4.0	4.0	.01	.01	16	2.5	.8	.8	.02	.02
Discing	2	3.2	3.7	3.7	.12	.12	34	2.5	1.5	1.5	.04	.04
Seeding	3	90.4	2.4	.8	2.17	.72	56	21.8	1.9	.8	.41	.17
Fertilizing	0	0	0	0	0	0	20	2.2	1.1	.6	.02	.01
Total	13	100.0	---	---	22.05	2.70	359	100.0	---	---	7.20	2.41
No harvest	3	3.5	---	---	---	---	38	7.9	---	---	---	---
Harvest	10	96.5	---	---	---	---	321	92.1	---	---	---	---
Nuts removed by:												
Machine shaking	10	96.5	4.4	4.0	4.25	3.86	52	47.0	2.5	2.0	1.18	.94
Hand shaking or knocking	0	0	0	0	0	0	55	5.3	5.2	0	.28	0
Falling naturally 5/	0	0	0	0	0	0	214	39.8	---	---	---	---
Nuts picked up by:												
Machine	3	7/ 95.4	6.1	5.1	5.82	4.87	6	16.9	4.0	3.4	.68	.57
Hand	8	7/ 7.7	27.5	0	2.12	0	212	69.0	31.3	0	21.60	0
Hauling	6	7.2	3.5	3.3	.25	.24	165	63.8	.8	.6	.51	.38
Other labor 6/	8	.3	17.9	0	.05	0	48	10.4	2.6	.5	.27	.05
Total	13	100.0	---	---	12.49	8.97	359	100.0	---	---	24.52	1.94

1/ Spraying and dusting time combined in Florida. 2/ Includes such practices as thinning, setting out, grafting, and tying limbs. 3/ Data not obtained. 4/ Data incomplete. 5/ Requires no man or power hours. 6/ Mostly supervision but also includes such practices as grading, cleaning, and weighing. 7/ Will add to more than the percent of acreage harvested (96.5) as 177 acres were covered by both machine and hand.

--- means not applicable; * means data not obtained.

Table 15.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, Arkansas, 1960-61

Variety	Average price	Quantity	Value	Proportion sold in:					Proportion sold to:				
				Oct.	Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent					Percent				
Stuart	.35	214,891	74,879	9	46	36	9	--	46	--	4	29	21
Success	.32	7,880	2,522	--	50	--	--	--	--	--	--	--	100
Schley	.34	44,647	15,034	--	50	25	25	--	50	--	50	--	--
Mahan	.34	350	119	--	--	--	--	100	100	--	--	--	--
Van Deman	.32	1,970	630	--	50	50	--	--	--	--	--	--	100
Other Improved	.37	313,784	116,577	--	43	43	5	9	38	12	6	31	13
Total Improved	.34	583,522	209,761	--	--	--	--	--	--	--	--	--	--
Seedling	.31	50,470	15,421	--	35	39	10	16	38	6	6	19	31
Total or Average	.36	633,992	225,481	--	--	--	--	--	--	--	--	--	--

1/ Includes few March sales and other sales not specified by months.
2/ Includes brokers, cooperatives, and not reported.

Table 16.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, Florida, 1960-61 3/

Variety	Average price	Quantity	Value	Proportion sold in:				Proportion sold to:				
				Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent				Percent				
Stuart	.35	21,878	7,711	34	49	15	2	72	--	--	28	--
Success	.28	1,778	507	25	38	37	--	86	--	--	14	--
Moneymaker	.24	4,737	1,113	29	57	14	--	88	--	--	12	--
Moore	.28	700	199	100	--	--	--	100	--	--	--	--
Schley	.375	400	150	--	50	--	50	--	--	--	100	--
Curtis	.34	125	42	50	50	--	--	100	--	--	--	--
Mahan	.60	600	360	50	50	--	--	--	--	--	100	--
Van Deman	.30	600	180	--	50	50	--	100	--	--	--	--
Other Improved	.29	17,407	5,110	32	44	24	--	88	--	--	12	--
Total or Average Improved	.32	48,225	15,372	--	--	--	--	--	--	--	--	--
Seedling	.30	19,660	5,985	34	48	14	4	81	--	--	19	--
Total or Average	.31	67,885	21,357	--	--	--	--	--	--	--	--	--

3/ Footnotes same as table 15.

Table 17.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, Georgia, 1960-61

Variety	Average price	Quantity	Value	Proportion sold in:				Proportion sold to:				
				Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent				Percent				
Stuart	.36	433,978	154,343	30	58	11	1	78	12	0	5	5
Success	.32	15,985	5,046	33	47	20	--	86	14	--	--	--
Teche	.26	77,922	20,343	28	54	18	--	69	15	--	8	8
Moneymaker	.28	235,252	65,616	35	52	11	2	68	12	--	9	11
Moore	.29	294,965	85,754	35	60	5	--	61	22	0	4	13
Schley	.40	403,972	160,839	27	58	14	1	70	20	--	8	2
Curtis	.28	13,234	3,742	25	75	--	--	--	25	--	25	50
Desirable	.37	74,399	27,479	37	53	5	5	36	36	--	9	19
Mahan	.33	2,160	711	--	100	--	--	50	--	--	--	50
Van Deman	.29	38,688	11,155	30	57	13	0	72	14	--	7	7
Other Improved	.30	154,836	46,957	22	64	3	0	74	16	--	9	6
Total Improved	.32	1,745,391	381,985	--	--	--	--	--	--	--	--	--
Seedling	.31	119,369	36,863	24	63	11	2	81	11	--	3	5
Total or Average	.33	1,864,760	618,848	--	--	--	--	--	--	--	--	--

1/ Includes few March sales and other sales not specified by months.
2/ Includes brokers and cooperatives.

Table 18.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, Mississippi, 1960-61

Variety	Average price	Quantity	Value	Proportion sold in:					Proportion sold to:				
				Oct.	Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent					Percent				
Stuart	.35	423,708	149,038	14	43	33	6	4	92	4	--	1	3
Success	.32	78,924	25,363	10	46	30	10	4	90	7	--	--	3
Schley	.37	62,680	23,361	13	44	31	6	6	90	--	--	--	10
Mahan	.33	58,420	19,456	--	36	36	10	18	86	--	--	--	14
Other Improved	.37	136,857	50,287	3	35	42	10	10	100	--	--	--	--
Total Improved	.35	760,589	267,505	--	--	--	--	--	--	--	--	--	--
Seedling	.29	73,136	20,962	11	26	33	15	15	96	4	--	--	--
Total or Average	.35	833,725	288,467	--	--	--	--	--	--	--	--	--	--

1/ Includes few March sales and other sales not specified by months.
2/ Includes brokers and cooperatives.

Table 19.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, New Mexico, 1960-61

Variety	Average price	Quantity	Value	Proportion sold in:				Proportion sold to:				
				Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent				Percent				
Schley	.38	5,749,462	2,184,511	9	33	33	25	20	--	--	--	80
Other 3/	.38	2,059,009	782,477	18	55	9	18	14	57	--	--	29
Seedling	.38	19,220	7,303	33	33	34	--	--	--	--	--	100
Total	.38	7,827,691	2,974,291	--	--	--	--	--	--	--	--	--

1/ Includes few March sales and other sales not specified by months.
2/ Includes other growers.
3/ Includes Bradley, Burhett, and other western varieties.

Table 20.--Price, quantity and value of pecan sales by growers, by variety, month of sale, and type of outlet, South Carolina, 1960-61

Variety	Average price	Quantity	Value	Proportion sold in:					Proportion sold to:				
				Oct.	Nov.	Dec.	Jan.	Feb. 1/	Dealer	Sheller	Auction	Trucker	Other 2/
	Cents	Pounds	Dollars	Percent					Percent				
Stuart	.35	21,816	7,585	--	85	7	4	4	50	19	--	31	--
Success (1)	.28	2,000	560	--	33	33	34	--	100	--	--	--	--
Moneymaker	.31	3,970	1,216	--	45	33	22	--	60	20	--	20	--
Schley	.41	5,361	2,187	--	50	33	17	--	50	--	--	50	--
Mahan (1)	.35	45	20	--	100	--	--	--	--	--	--	100	--
Van Deman (1)	.35	160	56	--	100	--	--	--	--	--	--	100	--
Other Improved	.37	59,527	21,744	5	62	19	14	--	43	9	--	48	--
Total Improved	.36	92,879	33,368	--	--	--	--	--	--	--	--	--	--
Seedling	.31	1,986	624	--	50	50	--	--	25	--	--	75	--
Total or Average	.36	94,865	33,992	--	--	--	--	--	--	--	--	--	--

1/ Includes few March sales and other sales not specified by months.
2/ Includes brokers and cooperatives.

Table 21.--Number of pecan farms and number of pecan trees by State and U.S. total, 1954 and 1959

State	Type of tree	Number of farms		Number of trees	
		1954	1959	1954	1959
Alabama	Improved	10,266	8,976	546,657	463,998
	Seedling	3,788	4,297	87,622	91,963
	Total	14,054	13,273	634,279	555,961
Arkansas	Improved	1,922	1,309	76,668	79,620
	Seedling	894	680	33,159	58,318
	Total	2,816	1,989	109,827	137,938
Florida	Improved	3,104	2,807	143,085	147,858
	Seedling	2,082	2,212	51,663	66,028
	Total	5,186	5,019	194,748	213,886
Georgia	Improved	15,093	13,354	1,854,828	1,626,069
	Seedling	5,043	6,514	130,135	152,206
	Total	20,136	19,868	1,984,963	1,778,275
Kentucky	Total	430	449	10,021	40,142
Louisiana	Improved	2,761	2,750	184,355	206,810
	Seedling	1,789	2,210	147,760	139,799
	Total	4,550	4,960	332,115	346,609
Mississippi	Improved	7,563	6,476	317,524	318,518
	Seedling	3,040	3,242	72,709	85,581
	Total	10,603	9,718	390,233	404,099
Missouri	Total	1,304	1,455	35,630	109,154
New Mexico	Total	283	318	104,473	121,709
North Carolina	Improved	2/	3,362	2/	45,140
	Seedling		712		10,553
	Total		4,074		55,693
Oklahoma	Improved	2,084	1,399	133,231	129,308
	Seedling	7,441	5,772	1,108,530	1,011,894
	Total	9,525	7,171	1,241,761	1,141,202
South Carolina	Improved	3,188	3,327	119,995	115,197
	Seedling	785	1,035	15,735	24,422
	Total	3,973	4,362	135,730	139,619
Tennessee	Total	2,099	1,645	15,110	22,082
Texas	Improved	8,463	6,356	605,638	647,517
	Seedling	11,146	9,478	1,589,702	1,419,592
	Total	19,609	15,834	2,195,340	2,067,109
Total U.S. 1/	Improved	54,444	50,116	3,981,981	3,780,035
	Seedling	36,008	36,152	3,237,015	3,060,356
	Total	90,452	86,268	7,218,996	6,840,391
Total U.S. 3/	Total	94,568	90,135	7,384,230	7,133,478

1/ Only States with breakdown of improved and seedling are included in these totals.
2/ Not available.
3/ Includes all States.

Table 22.--The production of improved pecans, by States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
						1,000 Pounds						
1962 1/	4,200	600	1,500	12,000	3,000	3,500	7,500	1,000	800	300	2,400	36,800
1961	42,000	1,000	3,100	65,200	3,500	10,500	4,650	1,300	700	6,800	3,600	142,350
1960	13,300	2,100	900	29,500	4,500	8,500	8,000	2,420	3,000	3,400	4,600	80,220
1959	12,200	800	2,500	35,000	2,000	2,200	5,450	1,050	500	3,700	4,800	70,200
1958	32,000	800	1,600	37,700	4,800	7,800	4,500	2,700	1,600	7,400	5,000	105,900
1957	3,300	1,500	1,300	4,700	2,200	3,400	5,400	650	2,200	910	8,600	34,160
1956	24,500	850	2,200	51,000	3,600	6,100	3,500	2,200	600	7,900	4,400	106,850
1955	6,800	1,800	6,400	8,000	2,000	4,500	3,800	300	3,300	200	5,700	42,800
1954	6,500	700	1,500	16,400	3,750	2,400	3,790	860	1,500	2,300	4,100	43,800
1953	24,000	1,600	4,000	46,500	6,000	7,050	2,510	3,175	1,600	5,580	4,200	106,215
1952	11,700	850	2,800	41,000	3,200	2,800	3,490	2,340	340	3,050	8,000	79.570
1951	21,300	800	3,440	42,300	3,450	7,000	1,840	2,190	1,500	3,680	1,100	88,600
1950	9,800	400	2,350	35,000	1,900	1,706	1,890	1,492	630	2,550	5,070	62,788
1949	11,500	650	1,790	14,620	3,950	5,500	1,390	2,255	2,040	2,350	4,060	50,105
1948	16,800	1,090	2,520	34,452	4,700	5,000	--	2,210	1,000	2,960	6,800	77,532
1947	6,175	654	1,590	23,444	1,500	1,305	--	1,630	3,100	2,695	3,100	45,193
1946	6,642	250	2,340	13,000	2,300	1,920	--	1,150	1,100	1,390	3,400	33,492
1945	9,680	882	2,209	30,954	1,900	3,000	--	2,741	1,500	2,500	3,870	59,236
1944	10.458	504	2,856	28,140	3,744	4,980	--	1,960	1,400	1,746	5,400	61,188
1943	9,655	1,200	2,579	25,620	2,640	4,900	--	2,750	1,550	2,311	3,900	57,105
1942	8,064	900	2,700	22,300	1,900	3,500	--	2,110	300	2,083	1,500	45,357
1941	10,553	682	2,616	22,549	1,400	3,927	--	3,340	1,224	2,185	2,873	51,349
1940	4,558	435	2,103	20,296	3,074	1,672	--	2,340	1,960	1,946	3,690	42,074
1939	7,600	668	1,944	18,337	2,153	4,305	--	1,280	760	2,007	1,843	40,897
1938	4,247	291	2,038	18,348	2,140	2,586	--	2,700	252	1,750	920	35,272
1937	6,118	527	1,463	16,925	3,326	5,208	--	2,430	920	1,705	1,350	39,972
1936	4,606	210	1,610	16,898	1,722	2,394	--	2,070	90	2,178	470	32,248
1935	4,320	430	1,253	11,827	1,934	3,638	--	1,520	1,120	1,153	2,250	29,445
1934	2,821	220	887	9,960	960	1,380	--	1,200	370	1,060	600	19,458
1933	3,365	340	1,024	9,495	2,326	3,056	--	920	260	1,053	1,080	22,919
1932	1,706	210	541	4,128	1,356	1,400	--	610	345	697	800	11,793
1931	3,428	350	1,667	8,607	1,802	3,240	--	760	135	788	1,190	21,967
1930	2,600	210	840	4,536	1,595	2,420	--	460	75	729	400	13,865

1/ December estimate.

Table 23.--The production of seedling pecans, by States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
						1,000 Pounds						
1962 1/	1,800	3,000	1,000	3,000	3,000	4,500	--	300	6,200	100	9,600	32,500
1961	8,000	5,100	1,700	13,400	32,500	15,000	--	200	10,900	1,200	16,400	104,400
1960	4,000	8,400	900	8,200	10,500	9,300	--	680	38,000	900	26,400	107,280
1959	3,000	3,800	2,000	8,000	18,000	3,200	--	200	8,500	900	27,200	74,800
1958	4,000	1,550	800	8,300	8,700	7,200	--	400	13,900	1,600	21,000	67,450
1957	700	8,000	1,100	2,800	14,900	4,300	--	250	28,500	190	46,700	107,440
1956	6,000	2,950	1,800	9,000	10,400	6,000	--	300	6,500	1,500	23,100	67,550
1955	1,200	6,150	4,500	2,000	23,000	5,500	--	50	29,700	100	32,300	104,500
1954	1,500	1,850	1,060	3,600	6,750	2,600	--	140	13,000	400	19,900	50,800
1953	6,000	9,050	3,300	10,100	18,000	10,000	--	605	26,000	1,100	23,800	107,955
1952	2,700	2,050	1,500	9,500	10,300	3,200	--	206	2,660	550	39,200	71,866
1951	4,700	4,550	1,840	9,200	12,250	6,600	--	245	23,500	650	4,600	68,135
1950	1,900	2,050	1,800	6,000	7,200	1,994	--	148	6,370	450	33,930	61,842
1949	2,525	4,250	1,340	2,380	13,050	4,500	--	250	21,960	390	24,940	75,585
1948	3,450	4,650	2,060	5,148	14,300	5,000	--	218	13,000	485	50,200	98,511
1947	1,265	3,196	1,060	3,816	4,000	1,595	--	242	40,900	435	17,900	74,409
1946	2,098	950	1,760	3,000	7,150	2,430	--	100	5,900	245	19,100	42,733
1945	2,420	4,018	1,735	5,896	7,700	4,250	--	339	24,500	380	28,380	79,618
1944	2,142	3,696	2,244	5,360	10,656	4,020	--	215	12,600	383	39,600	80,916
1943	2,567	3,400	1,945	4,880	9,360	4,100	--	370	24,450	345	22,100	73,517
1942	2,016	2,500	1,900	4,200	4,500	2,800	--	290	3,700	311	8,800	31,017
1941	2,317	3,578	2,056	3,671	4,200	2,963	--	330	29,376	327	19,227	68,045
1940	1,140	2,467	1,461	3,304	5,710	1,424	--	285	26,040	398	37,310	79,539
1939	2,262	2,875	1,528	3,493	5,023	3,579	--	220	18,240	411	17,157	54,788
1938	1,129	1,949	1,537	2,742	4,548	2,202	--	300	1,848	285	22,080	38,620
1937	1,726	4,738	1,017	2,755	7,762	3,771	--	300	17,480	325	25,650	65,524
1936	1,224	2.030	1,030	2,982	5,454	1,806	--	370	1,910	297	9,930	27,033
1935	1,080	4,370	736	2,253	6,858	2,858	--	340	26,880	157	47,750	93,282
1934	662	2,380	478	2,040	3,212	1,084	--	340	11,130	172	14,400	35,898
1933	739	3,860	505	1,945	8,249	2,401	--	290	10,240	171	25,920	54,320
1932	374	2,590	243	1,032	4,808	934	--	220	22,655	123	22,000	54,979
1931	702	4,400	681	1,889	6,390	2,760	--	290	13,365	162	33,810	64,449
1930	532	2,790	310	1,064	6,378	2,960	--	230	14,925	171	13,100	42,460

1/ December estimate.

Table 24.--Total production of pecans in the United States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
						1,000 Pounds						
1962 1/	6,000	3,600	2,500	15,000	6,000	8,000	7,500	1,300	7,000	400	12,000	69,300
1961	50,000	5,100	4,800	78,600	36,000	25,500	4,650	1,500	11,600	8,000	20,000	246,750
1960	17,300	10,500	1,800	37,700	15,000	17,800	8,000	3,100	41,000	4,300	31,000	187,500
1959	15,200	4,600	4,500	43,000	20,000	5,400	5,450	1,250	9,000	4,600	32,000	145,000
1958	36,000	2,350	2,400	46,000	13,500	15,000	4,500	3,100	15,500	9,000	26,000	173,350
1957	4,000	9,500	2,400	7,500	17,100	7,700	5,400	900	30,700	1,100	55,300	141,600
1956	30,500	3,800	4,000	60,000	14,000	12,100	3,500	2,500	7,100	9,400	27,500	174,400
1955	8,000	7,950	10,900	10,000	25,000	10,000	3,800	350	33,000	300	38,000	147,300
1954	8,000	2,550	2,560	20,000	10,500	5,000	3,790	1,000	14,500	2,700	24,000	94,600
1953	30,000	10,650	7,300	56,600	24,000	17,050	2,510	3,780	27,600	6,680	28,000	214,170
1952	14,400	2,900	4,300	50,500	13,500	6,000	3,490	2,546	3,000	3,600	47,200	151,436
1951	26,000	5,350	5,280	51,500	15,700	13,600	1,840	2,435	25,000	4,330	5,700	156,735
1950	11,700	2,450	4,150	41,000	9,100	3,700	1,890	1,640	7,000	3,000	39,000	124,630
1949	14,025	4,900	3,130	17,000	17,000	10,000	1,390	2,505	24,000	2,740	29,000	125,690
1948	20,250	5,740	4,580	39,600	19,000	10,000	--	2,428	14,000	3,445	57,000	176,043
1947	7,440	3,850	2,650	27,260	5,500	2,900	--	1,872	44,000	3,130	21,000	119,602
1946	8,740	1,200	4,100	16,000	9,450	4,350	--	1,250	7,000	1,635	22,500	76,225
1945	12,100	4,900	3,944	36,850	9,600	7,250	--	3,080	26,000	2,880	32,250	138,854
1944	12,600	4,200	5,100	33,500	14,400	9,000	--	2,175	14,000	2,129	45,000	142,104
1943	12,222	4,600	4,524	30,500	12,000	9,000	--	3,120	26,000	2,656	26,000	130,622
1942	10,080	3,400	4,600	26,500	6,400	6,300	--	2,400	4,000	2,394	10,300	76,374
1941	12,870	4,260	4,672	26,220	5,600	6,890	--	3,670	30,600	2,512	22,100	119,394
1940	5,698	2,902	3,564	23,600	8,784	3,096	--	2,625	28,000	2,344	41,000	121,613
1939	9,862	3,543	3,472	21,830	7,176	7,884	--	1,500	19,000	2,418	19,000	95,685
1938	5,376	2,240	3,575	21,090	6,688	4,788	--	3,000	2,100	2,035	23,000	73,892
1937	7,844	5,265	2,480	19,680	11,088	8,979	--	2,730	18,400	2,030	27,000	105,496
1936	5,830	2,240	2,640	19,880	7,176	4,200	--	2,440	2,000	2,475	10,400	59,281
1935	5,400	4,800	1,989	14,080	8,792	6,496	--	1,860	28,000	1,310	50,000	122,727
1934	3,483	2,600	1,365	12,000	4,172	2,464	--	1,540	11,500	1,232	15,000	55,356
1933	4,104	4,200	1,529	11,440	10,575	5,457	--	1,210	10,500	1,224	27,000	77,239
1932	2,080	2,800	784	5,160	6,164	2,334	--	830	23,000	820	22,800	66,772
1931	4,130	4,750	2,348	10,496	8,192	6,000	--	1,050	13,500	950	35,000	86,416
1930	3,132	3,000	1,150	5,600	7,973	5,380	--	690	15,000	900	13,500	56,325

1/ December estimate.

Table 25.--Percentage of improved and seedling pecans in the U.S., by States, 1930-62

Year	Alabama		Arkansas		Florida		Georgia		Louisiana		Mississippi		New Mexico		North Carolina		Oklahoma		South Carolina		Texas		Total	
	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling	Improved	Seedling
1962 1/	70	30	17	83	60	40	80	20	50	50	44	56	100	--	77	23	11	89	75	25	20	80	53	47
1961	84	16	16	84	65	35	83	17	10	90	41	59	100	--	87	13	6	94	85	15	18	82	58	42
1960	77	23	20	80	50	50	78	22	30	70	48	52	100	--	78	22	7	93	79	21	15	85	43	57
1659	80	20	17	83	56	44	81	19	10	90	41	59	100	--	84	16	6	94	80	20	15	85	48	52
1958	89	11	34	66	67	33	82	18	36	64	52	48	100	--	87	13	10	90	82	18	19	81	61	39
1957	82	18	16	84	54	46	63	37	13	87	44	56	100	--	72	28	7	93	83	17	16	84	24	76
1956	80	20	22	78	55	45	85	15	26	74	50	50	100	--	88	12	8	92	84	16	16	84	61	39
1955	85	15	23	77	59	41	80	20	8	92	45	55	100	--	86	14	10	90	67	33	15	85	29	71
1954	81	19	27	73	59	41	82	18	36	64	48	52	100	--	86	14	10	90	85	15	17	83	46	54
1953	80	20	15	85	55	45	82	18	25	75	41	59	100	--	84	16	6	94	84	16	15	85	50	50
1952	81	19	29	71	65	35	81	19	24	76	47	53	100	--	92	8	11	89	85	15	17	83	53	47
1951	82	18	15	85	65	35	82	18	22	78	51	49	100	--	90	10	6	94	85	15	19	81	57	43
1950	84	16	16	84	57	43	85	15	21	79	46	54	100	--	91	9	9	91	85	15	13	87	50	50
1949	82	18	13	87	57	43	86	14	23	77	55	45	100	--	90	10	8	92	86	14	14	86	40	60
1948	83	17	19	81	55	45	87	13	25	75	50	50	--	--	91	9	7	93	86	14	12	88	44	56
1947	83	17	17	83	60	40	86	14	27	73	45	55	--	--	87	13	7	93	86	14	15	85	38	62
1946	76	24	21	79	57	43	81	19	24	76	44	56	--	--	92	8	16	84	85	15	15	85	44	56
1945	80	20	18	82	56	44	84	16	20	80	41	59	--	--	89	11	6	94	87	13	12	88	43	57
1944	83	17	12	88	56	44	84	16	26	74	55	45	--	--	90	10	10	90	82	18	12	88	43	57
1943	79	21	26	74	57	43	84	16	22	78	54	46	--	--	88	12	6	94	87	13	15	85	44	56
1942	80	20	26	74	59	41	84	16	30	70	56	44	--	--	88	12	8	92	87	13	15	85	59	41
1941	82	18	16	84	56	44	86	14	25	75	57	43	--	--	91	9	4	96	87	13	13	87	43	57
1940	80	20	15	85	59	41	86	14	35	65	54	46	--	--	89	11	7	93	83	17	9	91	35	65
1939	77	23	19	81	56	44	84	16	30	70	55	45	--	--	85	15	4	96	83	17	10	90	43	57
1938	79	21	13	87	57	43	87	13	32	68	54	46	--	--	90	10	12	88	86	14	4	96	48	52
1937	78	22	10	90	59	41	86	14	30	70	58	42	--	--	89	11	5	95	84	16	5	95	38	62
1936	79	21	9	91	61	39	85	15	24	76	57	43	--	--	85	15	4	96	88	12	5	95	54	46
1935	80	20	9	91	63	37	84	16	22	78	56	44	--	--	82	18	4	96	88	12	4	96	24	76
1934	81	19	8	92	65	35	83	17	23	77	56	44	--	--	78	22	3	97	86	14	4	96	35	65
1933	82	18	8	92	67	33	83	17	22	78	56	44	--	--	76	24	2	98	86	14	4	96	30	70
1932	82	18	8	92	69	31	80	20	22	78	60	40	--	--	73	27	2	98	95	15	4	96	18	82
1931	83	17	7	93	71	29	82	18	22	78	54	46	--	--	72	28	1	99	83	17	3	97	25	75
1930	83	17	7	93	73	27	81	19	20	80	45	55	--	--	67	33	2/	100	81	19	3	97	3	97

1/ December estimate.
2/ Less than 0.5 percent.

Table 26.--Average prices per pound to growers for all pecans, by States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
						-Cents-						
1962	--	--	--	--	--	--	--	--	--	--	--	--
1961	18.5	18.2	18.7	18.3	16.9	16.4	25.0	21.3	17.7	16.9	19.0	18.1
1960	32.7	31.1	31.1	32.5	30.2	30.1	38.0	32.1	29.6	30.9	29.0	31.0
1959	30.8	35.1	29.2	33.2	32.3	33.5	37.0	31.1	31.7	30.0	32.3	32.5
1958	27.2	30.2	26.2	29.0	27.4	25.5	35.0	26.3	28.4	28.5	28.6	28.1
1957	28.7	22.9	26.4	28.8	22.3	24.7	32.0	30.4	22.1	30.0	23.1	23.7
1956	18.0	20.2	17.1	17.6	18.2	17.7	25.0	19.6	19.5	18.8	20.3	18.5
1955	41.8	32.0	37.9	40.0	29.4	32.7	40.0	42.7	30.3	41.5	31.4	32.8
1954	32.5	25.2	30.2	30.8	25.9	26.6	35.0	29.1	27.2	29.8	27.0	28.6
1953	15.4	15.4	14.7	16.9	15.7	15.0	25.0	20.1	15.5	18.0	17.0	16.3
1952	23.4	21.2	21.0	23.8	20.0	20.9	25.0	24.7	19.7	24.0	20.6	22.1
1951	19.1	18.7	18.3	20.4	19.3	17.4	30.0	24.5	18.6	24.0	22.8	19.7
1950	29.7	25.9	27.5	30.6	26.4	27.6	35.0	30.6	26.9	30.5	27.3	28.8
1949	19.2	18.5	17.9	20.8	17.1	17.6	25.0	24.6	18.7	20.8	18.3	18.8
1948	13.5	10.6	11.1	12.9	12.3	12.8	--	21.6	11.5	14.3	11.2	12.2
1947	28.2	19.0	22.7	27.4	24.6	24.4	--	32.3	18.4	25.8	21.2	22.3
1946	36.4	36.0	33.2	40.4	30.7	31.3	--	40.1	30.7	39.4	29.9	33.7
1945	27.1	22.9	23.9	27.9	21.1	21.9	--	30.2	20.6	29.5	20.9	23.8
1944	26.2	23.1	22.4	26.1	18.6	21.3	--	31.9	17.1	29.3	18.2	21.5
1943	25.6	22.9	23.4	28.4	20.2	21.3	--	29.0	19.6	27.1	20.0	23.1
1942	16.7	16.0	16.3	18.2	15.4	16.4	--	18.4	16.5	18.2	17.0	17.1
1941	11.0	10.9	10.1	11.5	10.0	9.9	--	15.7	8.8	13.2	9.6	10.3
1940	11.2	9.0	9.6	11.5	9.7	12.6	--	14.6	7.1	13.3	7.3	8.9
1939	10.1	9.2	8.4	11.4	9.6	8.7	--	15.4	8.1	14.1	8.8	9.7
1938	10.5	8.0	8.6	10.7	9.5	9.9	--	13.6	7.6	12.9	7.3	9.4
1937	8.4	5.8	7.5	9.7	8.2	8.4	--	15.6	5.5	13.7	6.5	7.8
1936	12.3	10.3	11.7	13.2	12.2	12.3	--	18.5	9.2	16.1	10.0	12.4
1935	11.4	6.8	10.0	9.9	8.7	11.1	--	18.3	4.2	15.9	5.1	6.8
1934	14.0	9.8	13.1	12.9	12.4	16.4	--	19.1	11.9	16.8	11.4	12.6
1933	13.6	7.1	10.3	11.0	7.0	10.3	--	17.4	5.6	14.3	6.2	8.1
1932	11.8	7.0	12.1	11.6	8.3	11.7	--	15.4	3.6	13.4	4.3	5.9
1931	13.0	6.7	12.2	10.9	9.4	10.8	--	18.4	5.1	16.0	5.7	7.8
1930	22.8	13.3	25.8	27.0	14.4	18.7	--	28.0	9.2	26.1	11.5	15.0

Table 27.--Average prices per pound to growers for improved pecans, by States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
							Cents					
1962	--	--	--	--	--	--	--	--	--	--	--	--
1961	19.0	22.0	20.0	19.0	20.5	18.5	25.0	22.0	29.0	17.5	28.0	19.5
1960	34.0	33.5	35.0	33.5	33.0	32.5	38.0	34.0	36.5	32.0	35.0	34.1
1959	31.5	38.0	31.0	34.0	35.0	36.0	37.0	32.0	44.0	31.0	40.0	34.1
1958	27.5	31.5	28.0	30.0	28.0	25.5	35.0	27.0	36.5	30.0	35.0	29.3
1957	30.0	28.0	30.0	32.0	28.5	29.5	32.0	35.0	30.5	31.5	32.0	31.0
1956	18.5	22.5	18.0	18.0	19.0	19.0	25.0	20.0	31.0	19.5	30.0	19.2
1955	43.0	39.0	42.0	42.0	35.0	38.0	40.0	44.0	38.5	46.0	42.0	40.9
1954	34.0	31.0	34.0	32.0	31.0	31.0	35.0	30.0	34.0	31.0	34.0	32.7
1953	16.0	17.5	16.0	17.5	18.0	16.5	25.0	21.0	24.1	18.8	25.5	17.8
1952	24.5	24.0	22.5	25.0	25.0	24.0	25.0	25.0	30.0	25.0	28.5	25.2
1951	20.0	23.0	20.0	21.5	24.0	20.0	30.0	25.0	29.0	25.0	34.5	21.7
1950	30.5	32.0	29.0	31.5	32.0	32.0	35.0	31.0	38.0	31.5	36.5	31.8
1949	20.0	22.0	19.5	21.5	21.0	20.0	25.0	25.0	27.0	21.5	27.0	21.8
1948	14.4	15.5	12.5	13.5	18.0	16.7	--	22.0	25.0	15.0	21.0	15.2
1947	29.4	25.0	24.4	28.5	35.5	32.0	--	33.0	31.0	27.0	35.0	29.4
1946	38.4	46.0	36.0	42.5	35.1	36.5	--	40.6	42.2	41.0	41.0	40.2
1945	28.7	33.0	26.5	29.1	26.2	26.0	--	30.8	31.8	30.5	32.0	29.2
1944	27.4	35.0	25.5	27.5	25.7	25.5	--	32.4	29.5	31.0	30.7	27.7
1943	27.0	31.0	26.0	29.8	26.0	24.1	--	30.0	30.3	28.0	29.8	28.5
1942	17.5	24.5	18.0	18.8	19.8	17.8	--	19.0	23.6	19.0	36.0	18.9
1941	11.5	18.0	12.0	12.1	15.6	11.5	--	16.0	15.2	13.7	16.7	12.8
1940	12.0	15.0	11.2	12.2	13.2	15.1	--	15.0	13.3	14.0	14.0	12.8
1939	10.9	15.9	9.5	12.0	13.9	10.3	--	16.0	14.1	15.0	16.0	12.2
1938	11.4	15.0	10.0	11.1	13.0	12.0	--	14.0	15.2	13.5	15.4	11.8
1937	9.1	13.0	8.8	10.1	12.0	10.5	--	16.0	13.6	14.5	14.3	10.9
1936	13.3	18.0	13.6	14.0	16.3	15.0	--	19.2	17.8	16.7	18.4	14.7
1935	12.5	14.5	12.0	10.7	13.8	13.9	--	19.1	8.3	16.5	13.0	12.4
1934	15.0	18.0	15.0	13.8	17.0	19.0	--	20.0	21.0	17.5	20.0	15.5
1933	15.0	14.5	12.0	12.0	10.5	12.5	--	19.0	13.5	15.0	15.0	13.0
1932	13.0	14.0	14.0	13.0	13.0	14.5	--	17.0	13.0	14.0	13.0	13.5
1931	14.0	15.0	14.0	12.0	16.0	14.0	--	20.0	19.0	17.0	17.0	13.9
1930	25.0	30.0	29.0	30.0	24.0	27.0	--	33.0	30.5	28.0	27.0	27.7

Table 28.--Average prices per pound to growers for seedling pecans, by States, 1930-62

Year	Alabama	Arkansas	Florida	Georgia	Louisiana	Mississippi	New Mexico	North Carolina	Oklahoma	South Carolina	Texas	Total
							Cents					
1962	--	--	--	--	--	--	--	--	--	--	--	--
1961	15.5	17.5	16.0	15.0	16.5	15.0	--	16.0	17.0	14.0	17.0	16.2
1960	28.5	30.5	27.0	29.0	29.0	28.0	--	25.0	29.0	27.0	28.0	28.7
1959	28.0	34.5	27.0	29.5	32.0	32.0	--	26.0	31.0	26.0	31.0	31.0
1958	25.0	29.5	22.0	24.0	27.0	25.5	--	21.0	27.5	22.0	27.0	26.3
1957	22.0	22.0	22.0	23.5	21.5	21.5	--	25.0	21.5	22.0	21.5	21.6
1956	16.0	19.5	16.0	15.0	18.0	16.5	--	16.0	18.5	15.0	18.5	17.4
1955	34.0	30.0	32.0	32.0	29.0	29.0	--	33.0	29.5	35.0	29.5	29.6
1954	25.5	23.0	25.0	25.0	23.0	23.0	--	22.0	26.5	23.0	25.5	25.2
1953	13.0	15.0	13.0	14.0	15.0	18.5	--	15.0	15.0	13.7	15.5	14.7
1952	18.5	20.0	18.0	18.5	18.5	15.0	--	20.0	18.5	18.5	19.0	18.8
1951	15.0	18.0	15.0	15.5	18.0	15.0	--	19.0	18.0	18.5	20.0	17.2
1950	25.5	25.0	25.5	25.5	25.0	25.0	--	23.0	26.0	24.5	26.0	25.7
1949	15.4	18.0	15.7	16.5	16.0	15.0	--	19.0	18.0	16.5	17.0	17.0
1948	9.2	9.5	9.3	9.0	10.5	9.4	--	16.0	10.5	10.0	10.0	10.0
1947	22.0	18.0	20.0	20.5	21.0	19.0	--	26.0	17.5	18.0	19.0	18.3
1946	29.8	34.0	29.5	31.2	29.4	28.0	--	31.8	28.7	29.5	28.0	28.8
1945	20.4	21.0	20.5	21.6	20.0	19.5	--	24.2	20.0	22.5	19.5	20.0
1944	20.0	22.0	18.5	18.4	16.2	16.5	--	24.5	15.8	21.8	16.6	16.9
1943	20.5	20.0	20.0	21.2	18.5	17.2	--	22.0	18.9	21.0	18.3	19.0
1942	13.5	13.0	14.0	14.8	13.5	14.5	--	14.0	15.9	13.0	15.5	14.6
1941	8.6	9.5	7.8	7.9	8.2	7.7	--	13.0	8.5	9.7	8.5	8.5
1940	8.0	8.0	7.2	7.5	7.8	9.6	--	11.0	5.6	9.7	6.6	6.9
1939	7.5	7.7	7.0	8.0	7.7	6.8	--	12.0	7.9	10.0	8.0	7.8
1938	7.3	7.0	6.8	8.1	7.8	7.5	--	10.3	6.6	9.0	7.0	7.2
1937	5.9	5.0	5.5	7.1	6.5	5.6	--	12.0	5.1	10.0	6.1	5.8
1936	8.3	9.5	8.6	8.9	10.9	8.8	--	14.5	8.8	11.3	9.6	9.6
1935	7.0	6.0	6.7	5.8	7.3	7.5	--	15.1	4.0	11.3	4.7	5.0
1934	9.5	9.0	9.6	8.6	11.0	13.0	--	16.0	11.6	12.2	11.0	11.0
1933	7.0	6.5	7.0	6.0	6.0	7.5	--	12.5	5.4	10.0	5.8	6.0
1932	6.5	6.5	8.0	6.2	7.0	7.5	--	11.0	3.5	9.5	4.0	4.4
1931	8.0	6.0	8.0	6.0	7.5	7.0	--	14.0	5.0	11.0	5.3	5.8
1930	12.0	12.0	17.0	14.0	12.0	12.0	--	18.0	9.1	18.0	11.0	10.8

Table 29.--Imports and exports of shelled and in-shell pecans, 1950-1961

Year	Imports		Exports	
	Shelled	In-shell	Shelled	In-shell
	Pounds			
1961....	66,280	--	1,322,069	885,219
1960....	466,980	442,040	996,674	486,364
1959....	535,572	921,361	857,505	452,503
1958....	382,468	121,664	1,006,824	433,638
1957....	378,834	47,820	951,818	435,655
1956....	247,109	132,046	779,242	557,095
1955....	464,437	737,854	632,372	259,380
1954....	421,085	38,448	731,236	528,296
1953....	247,731	--	949,836	670,173
1952....	217,309	--	712,922	658,114
1951....	374,515	--	620,182	406,155
1950....	624,529	19,329	517,507	325,596

Source: United States Department of Commerce, Bureau of the Census, monthly issues of "F.T. 110" and "F.T. 410."

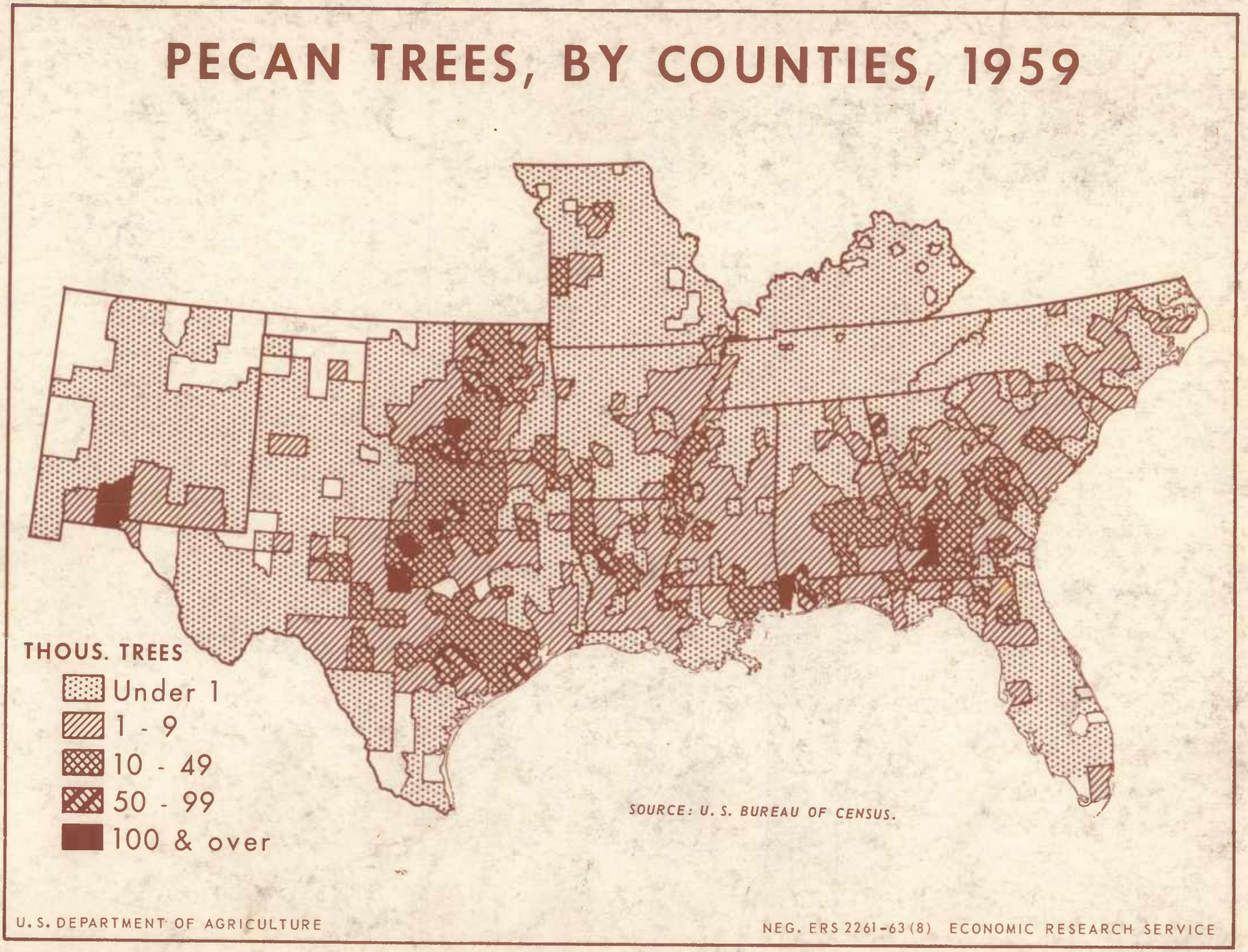

Figure 5

* U.S. GOVERNMENT PRINTING OFFICE : 1963 O—706-884